College of Education

M.S. in Education

The M.S. in Education program is designed to develop educators serving students in K–12 classrooms as scholar-practitioners or prepare classroom educators to be school principals. The specializations teach advanced skills that are designed to improve student learning. Each specialization area encourages educators to put their new skills to the test in actual classroom and school settings and to continually challenge the results of teaching and learning.

Specializations

- Curriculum, Instruction, and Assessment (Grades K–12)
- Educational Leadership
- Elementary Reading and Literacy (Grades K–6)
- Elementary Reading and Mathematics (Grades K–6)
- Integrating Technology in the Classroom (Grades 3–12)
- Literacy and Learning in the Content Areas (Grades 6–12)
- Mathematics (Grades K–5)
- Mathematics (Grades 6–8)
- Middle Level Education (Grades 5–8)
- Science (Grades K–8)

The College of Education, in collaboration with Canter & Associates, also provides a series of independent courses for graduate credit. Such courses are available during each of the three semesters throughout the year. Many of these courses may be substituted for courses in master’s degree program specializations. A list of courses to be offered for each semester can be requested by calling 800-669-9011.

Degree Requirements

- 30–36 semester credits (depending on the specialization)
- Core courses
- Specialization courses
- Program Portfolio, except in the Science (Grades K–8) specialization

Prospective Washington state students are advised to contact the Office of the Superintendent of Public Instruction at 360-725-6320 or profed@ospi.webnet.edu to determine whether this education program is approved for teacher certification or endorsements in Washington state. Additionally, teachers are advised to contact their individual school district as to whether this program may qualify for salary advancement.
Curriculum

The M.S. in Education program is offered on a semester system. Each specialization has a planned sequence of courses. The Program Portfolio must be completed during or immediately following the final term of enrollment—except in the Science (Grades K–8) specialization, which does not require a portfolio at this time.

Curriculum, Instruction, and Assessment (Grades K–12) Specialization

The Curriculum, Instruction, and Assessment (Grades K–12) specialization is a 30-semester-credit program based on standards set forth by the National Board for Professional Teaching Standards and various content area professional societies. The alignment of curriculum, assessment, and instruction is a complex task, but helps to meet this goal: All children can learn. Instituting standards inherently levels the playing field, suggesting the same achievement goals for all students, regardless of socioeconomic conditions, ethnicity, or learning differences. Program content focuses on current thinking about how teachers can best align their curriculum with state and local content standards. In addition, the program helps teachers integrate literacy and technology instruction with teaching content. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed sequence for online cohorts of students. A Program Portfolio based on the program’s identified outcomes must be submitted and approved before the degree is granted.

Core Courses (15 sem. cr.)
EDUC 6610 Teacher as Professional (3 sem. cr.)
EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
EDUC 6620 Collaborative Action Research (3 sem. cr.)
EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
EDUC 6635 Classroom Management to Promote Student Learning (3 sem. cr.)

Specialization Courses (15 sem. cr.)
EDUC 6630 Instructional Models and Strategies (3 sem. cr.)
EDUC 6671 Designing Curriculum, Instruction, and Assessment, Part I (3 sem. cr.)
EDUC 6672 Designing Curriculum, Instruction, and Assessment, Part II (3 sem. cr.)
EDUC 6673 Literacy and Learning in the Information Age (3 sem. cr.)
EDUC 6674 Designing Curriculum, Instruction, and Assessment for Students With Special Needs (3 sem. cr.)

Course Sequence

First Semester
EDUC 6610 Teacher as Professional
EDUC 6671 Designing Curriculum, Instruction, and Assessment, Part I

Second Semester
EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences
EDUC 6672 Designing Curriculum, Instruction, and Assessment, Part II

Third Semester
EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning
EDUC 6630 Instructional Models and Strategies
Fourth Semester
EDUC 6620 Collaborative Action Research
EDUC 6673 Literacy and Learning in the Information Age

Fifth Semester
EDUC 6635 Classroom Management to Promote Student Learning
EDUC 6674 Designing Curriculum, Instruction, and Assessment for Students With Special Needs

The Curriculum, Instruction, and Assessment (Grades K–12) specialization has a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details, call 888-627-1153 or consult www.degrees4educators.com.

Educational Leadership Specialization
The Educational Leadership specialization is a 36-semester-credit program designed for classroom teachers who want to become school principals. The curriculum reflects the standards for leadership education developed by the Interstate School Leaders Licensure Consortium and the National Policy Board for Educational Administration. This program, grounded in research and evidence of best practices, defines what principals need to know and be able to do, at the most practical level, to enhance learning opportunities and outcomes for all students. Each course is 8 weeks in length, and there are two consecutive courses per semester. Internship activities are accomplished throughout the program and in a concluding Internship course.

Courses (36 sem. cr.)
EDAD 6800 Facilitating Effective Learning for All Students (3 sem. cr.)
EDAD 6801 Ensuring Quality Education for Students With Diverse Needs (3 sem. cr.)
EDAD 6802 Using Data to Strengthen Schools (3 sem. cr.)
EDAD 6803 Allocating Resources Strategically and Structuring the Organization for Learning (3 sem. cr.)
EDAD 6804 Enhancing Teacher Capacity and Commitment (3 sem. cr.)
EDAD 6805 Facilitating Productive Working Relationships and School Culture to Enhance Student Learning (3 sem. cr.)
EDAD 6806 Collaborating With Families and Communities for Student Success (3 sem. cr.)
EDAD 6807 Creating Positive, Safe, and Effective Learning Environments (3 sem. cr.)
EDAD 6808 Meeting the Literacy Challenge: Leading New Initiatives (3 sem. cr.)
EDAD 6809 Implementing Continuous School Improvement (3 sem. cr.)
EDAD 6810 Internship (6 sem. cr.)

Course Sequence
First Semester
EDAD 6800 Facilitating Effective Learning for All Students
EDAD 6801 Ensuring Quality Education for Students With Diverse Needs

Second Semester
EDAD 6802 Using Data to Strengthen Schools
EDAD 6803 Allocating Resources Strategically and Structuring the Organization for Learning

Third Semester
EDAD 6804 Enhancing Teacher Capacity and Commitment
EDAD 6805  Facilitating Productive Working Relationships and School Culture to Enhance Student Learning

Fourth Semester
EDAD 6806  Collaborating With Families and Communities for Student Success
EDAD 6807  Creating Positive, Safe, and Effective Learning Environments

Fifth Semester
EDAD 6808  Meeting the Literacy Challenge: Leading New Initiatives
EDAD 6809  Implementing Continuous School Improvement

Sixth Semester
EDAD 6810  Internship

The Educational Leadership specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult www.degrees4educators.com.

Elementary Reading and Literacy (Grades K–6) Specialization
The Elementary Reading and Literacy (Grades K–6) specialization is a 30-semester-credit program based on the International Reading Association standards for the “classroom professional.” This specialization is designed to meet the needs of K–6 classroom teachers who want to improve the reading and literacy skills of their students. Program content focuses on the research and best practices related to the teacher as a professional, effective teaching using learning styles and multiple intelligences, collaborative action research, thinking skills to promote self-directed learning, instructional models and strategies, knowledge and beliefs about reading and literacy, reading instruction and assessment, and organizing and enhancing a classroom literacy program. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed online sequence. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.

Core Courses (15 sem. cr.)
EDUC 6610  Teacher as Professional (3 sem. cr.)
EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
EDUC 6620  Collaborative Action Research (3 sem. cr.)
EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
EDUC 6630  Instructional Models and Strategies (3 sem. cr.)

Specialization Courses (15 sem. cr.)
EDUC 6641  Foundations of Reading and Literacy Development (3 sem. cr.)
EDUC 6642  Strategies for Literacy Instruction, Part I (3 sem. cr.)
EDUC 6643  Strategies for Literacy Instruction, Part II (3 sem. cr.)
EDUC 6644  Supporting the Struggling Reader (3 sem. cr.)
EDUC 6645  Planning and Managing the Classroom Literacy Program (3 sem. cr.)

Course Sequence
First Semester
EDUC 6610  Teacher as Professional
EDUC 6641  Foundations of Reading and Literacy Development
Second Semester
EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences
EDUC 6642 Strategies for Literacy Instruction, Part I

Third Semester
EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning
EDUC 6643 Strategies for Literacy Instruction, Part II

Fourth Semester
EDUC 6620 Collaborative Action Research
EDUC 6644 Supporting the Struggling Reader

Fifth Semester
EDUC 6630 Instructional Models and Strategies
EDUC 6645 Planning and Managing the Classroom Literacy Program

The Elementary Reading and Literacy (Grades K–6) specialization has a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details, call 888-627-1153 or consult www.degrees4educators.com.

Elementary Reading and Mathematics (Grades K–6) Specialization

The Elementary Reading and Mathematics (Grades K–6) specialization is a 30-semester-credit program that offers teachers proven strategies to create classrooms that succeed in both reading and mathematics. Teachers enhance their instructional skills in reading while deepening their understanding of key mathematical concepts. They learn to foster literary and analytical skills in young learners using research-based strategies, proven diagnostic tools for struggling readers, and techniques to motivate learners. They also develop their understanding of the mathematics concepts that their K–6 students are expected to learn, and consequently, increase the effectiveness of their mathematics instruction. Each course is 8 weeks in length, and there are two consecutive courses per semester. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.

Core Courses (9 sem. cr.)
EDUC 6610 Teacher as Professional (3 sem. cr.)
EDUC 6620 Collaborative Action Research (3 sem. cr.)
EDUC 6677 Designing Curriculum and Instruction (3 sem. cr.)

Specialization Courses (21 sem. cr.)
EDUC 6642 Strategies for Literacy Instruction, Part I (3 sem. cr.)
EDUC 6643 Strategies for Literacy Instruction, Part II (3 sem. cr.)
EDUC 6644 Supporting the Struggling Reader (3 sem. cr.)
MATH 6681 Elementary Mathematics: Number and Operations (3 sem. cr.)
MATH 6682 Elementary Mathematics: Geometry and Measurement (3 sem. cr.)
MATH 6683 Elementary Mathematics: Algebra (3 sem. cr.)
MATH 6684 Elementary Mathematics: Data Analysis and Probability (3 sem. cr.)
Course Sequence

First Semester
EDUC 6610  Teacher as Professional
EDUC 6642  Strategies for Literacy Instruction, Part I

Second Semester
EDUC 6643  Strategies for Literacy Instruction, Part II
MATH 6681  Elementary Mathematics: Number and Operations

Third Semester
EDUC 6644  Supporting the Struggling Reader
MATH 6682  Elementary Mathematics: Geometry and Measurement

Fourth Semester
EDUC 6677  Designing Curriculum and Instruction
MATH 6683  Elementary Mathematics: Algebra

Fifth Semester
MATH 6684  Elementary Mathematics: Data Analysis and Probability
EDUC 6620  Collaborative Action Research

The Elementary Reading and Mathematics (Grades K–6) specialization has a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details, call 888-627-1153 or consult www.degrees4educators.com.

Integrating Technology in the Classroom (Grades 3–12) Specialization

The Integrating Technology in the Classroom (Grades 3–12) specialization is a 30-semester-credit program based on the standards of the National Board for Professional Teaching Standards and the International Society for Technology in Education. This specialization is designed to meet the needs of classroom teachers of grades 3–12, who want to use technology to enhance learning experiences in their classrooms. Program content focuses on the research and best practices related to the teacher as a professional, effective teaching using learning styles and multiple intelligences, collaborative action research, thinking skills to promote self-directed learning, instructional models and strategies, knowledge and beliefs about new technology, technology integration strategies, and managing change. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed sequence for online cohorts of students. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.

Core Courses (15 sem. cr.)
EDUC 6610  Teacher as Professional (3 sem. cr.)
EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
EDUC 6620  Collaborative Action Research (3 sem. cr.)
EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
EDUC 6630  Instructional Models and Strategies (3 sem. cr.)

Specialization Courses (15 sem. cr.)
EDUC 6661  Exploring New Technologies: The Impact on Society, Work, and Education (3 sem. cr.)
EDUC 6662 Multimedia Tools: How to Research, Plan, and Communicate With Technology (3 sem. cr.)
EDUC 6663 Integrating Technology in the Curriculum, Part I (3 sem. cr.)
EDUC 6664 Integrating Technology in the Curriculum, Part II (3 sem. cr.)
EDUC 6665 Technology, Leadership, and a Vision for the Future (3 sem. cr.)

**Course Sequence**

**First Semester**
- EDUC 6610 Teacher as Professional
- EDUC 6661 Exploring New Technologies: The Impact on Society, Work, and Education

**Second Semester**
- EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences
- EDUC 6662 Multimedia Tools: How to Research, Plan, and Communicate With Technology

**Third Semester**
- EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning
- EDUC 6663 Integrating Technology in the Curriculum, Part I

**Fourth Semester**
- EDUC 6620 Collaborative Action Research
- EDUC 6664 Integrating Technology in the Curriculum, Part II

**Fifth Semester**
- EDUC 6630 Instructional Models and Strategies
- EDUC 6665 Technology, Leadership, and a Vision for the Future

The Integrating Technology in the Classroom (Grades 3–12) specialization has a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details, call 888-627-1153 or consult [www.degrees4educators.com](http://www.degrees4educators.com).

**Literacy and Learning in the Content Areas (Grades 6–12) Specialization**

The Literacy and Learning in the Content Areas (Grades 6–12) specialization is a 30-semester-credit program designed to help content area teachers of grades 6–12 improve their students’ literacy skills. The program features research-based strategies to help teachers prepare struggling students for more complex, abstract, and sophisticated learning in the content area classroom, whether History, Science, Mathematics, Social Studies, English, or other. The program is based on the nationally accepted standards for teaching reading in the classroom as set forth by the International Reading Association, as well as the National Board for Professional Teaching Standards. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed sequence for online cohorts of students. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.

**Core Courses (18 sem. cr.)**
- EDUC 6610 Teacher as Professional (3 sem. cr.)
- EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
- EDUC 6620 Collaborative Action Research (3 sem. cr.)
- EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I (3 sem. cr.)
EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II (3 sem. cr.)

**Specialization Courses (12 sem. cr.)**
READ 6581  Reading in the Content Areas, Grades 6–12 (3 sem. cr.)
READ 6582  Writing in the Content Areas, Grades 6–12 (3 sem. cr.)
READ 6583  Technology and Literacy in the Content Areas, Grades 6–12 (3 sem. cr.)
READ 6584  Supporting Struggling Readers, Grades 6–12 (3 sem. cr.)

**Course Sequence**

**First Semester**
EDUC 6610  Teacher as Professional
EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences

**Second Semester**
EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I
READ 6581  Reading in the Content Areas, Grades 6–12

**Third Semester**
EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II
READ 6583  Technology and Literacy in the Content Areas, Grades 6–12

**Fourth Semester**
EDUC 6620  Collaborative Action Research
READ 6582  Writing in the Content Areas, Grades 6–12

**Fifth Semester**
EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning
READ 6584  Supporting Struggling Readers, Grades 6–12

The Literacy and Learning in the Content Areas (Grades 6–12) specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult www.degrees4educators.com.

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**Mathematics (Grades K–5) Specialization**

The Mathematics (Grades K–5) specialization is a 30-semester-credit program based on the National Council of Teachers of Mathematics’ Standards for School Mathematics and the National Board for Professional Teaching Standards. This specialization is designed to help teachers improve their own mathematics content skills, which should lead to more effective teaching of mathematics. Program content focuses on the content areas of number and operations, geometry, measurement, algebra, and data analysis and probability, as well as on the research and best practices related to the teacher as a professional, effective teaching using learning styles and multiple intelligences, collaborative action research, thinking skills to promote self-directed learning, instructional models and strategies, and knowledge and beliefs about designing curriculum, instruction, and assessment. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed sequence for online cohorts of students. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.
Core Courses (18 sem. cr.)
EDUC 6610  Teacher as Professional (3 sem. cr.)
EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
EDUC 6620  Collaboration Action Research (3 sem. cr.)
EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I (3 sem. cr.)
EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II (3 sem. cr.)

Specialization Courses (12 sem. cr.)
MATH 6681  Elementary Mathematics: Number and Operations (3 sem. cr.)
MATH 6682  Elementary Mathematics: Geometry and Measurement (3 sem. cr.)
MATH 6683  Elementary Mathematics: Algebra (3 sem. cr.)
MATH 6684  Elementary Mathematics: Data Analysis and Probability (3 sem. cr.)

Course Sequence
First Semester
EDUC 6610  Teacher as Professional
EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences

Second Semester
MATH 6681  Elementary Mathematics: Number and Operations
EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I

Third Semester
MATH 6682  Elementary Mathematics: Geometry and Measurement
EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II

Fourth Semester
EDUC 6620  Collaborative Action Research
MATH 6683  Elementary Mathematics: Algebra

Fifth Semester
EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning
MATH 6684  Elementary Mathematics: Data Analysis and Probability

The Mathematics (Grades K–5) specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult www.degrees4educators.com.

Mathematics (Grades 6–8) Specialization
The Mathematics (Grades 6–8) specialization is a 30-semester-credit program designed to help mathematics teachers of grades 6–8 demonstrate high competency in the mathematics content they should be teaching. Teachers also learn proven research-based strategies and real-world applications to improve student achievement in mathematics. The program aligns with the National Board for Professional Teaching Standards and the National Council of Teachers of Mathematics’ Standards for School Mathematics, addressing both content and process standards. Each course is 8 weeks in length, and there are two consecutive courses per semester. The program is offered in a prescribed sequence for online
cohorts of students. A Program Portfolio based on the specific outcomes of the program must be submitted and approved before the degree is granted.

**Core Courses (18 sem. cr.)**
- EDUC 6610  Teacher as Professional (3 sem. cr.)
- EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)
- EDUC 6620  Collaborative Action Research (3 sem. cr.)
- EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)
- EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I (3 sem. cr.)
- EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II (3 sem. cr.)

**Specialization Courses (12 sem. cr.)**
- MATH 6571  Number and Operations, Grades 6–8 (3 sem. cr.)
- MATH 6572  Geometry and Measurement, Grades 6–8 (3 sem. cr.)
- MATH 6573  Algebra, Grades 6–8 (3 sem. cr.)
- MATH 6574  Data Analysis and Probability, Grades 6–8 (3 sem. cr.)

**Course Sequence**
**First Semester**
- EDUC 6610  Teacher as Professional
- EDUC 6615  Effective Teaching Using Learning Styles and Multiple Intelligences

**Second Semester**
- EDUC 6671  Designing Curriculum, Instruction, and Assessment, Part I
- MATH 6571  Number and Operations, Grades 6–8

**Third Semester**
- EDUC 6672  Designing Curriculum, Instruction, and Assessment, Part II
- MATH 6572  Geometry and Measurement, Grades 6–8

**Fourth Semester**
- EDUC 6620  Collaborative Action Research
- MATH 6573  Algebra, Grades 6–8

**Fifth Semester**
- EDUC 6625  Habits of Mind: Thinking Skills to Promote Self-Directed Learning
- MATH 6574  Data Analysis and Probability, Grades 6–8

The Mathematics (Grades 6–8) specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult [www.degrees4educators.com](http://www.degrees4educators.com).

**Middle Level Education (Grades 5–8) Specialization**
The Middle Level Education (Grades 5–8) specialization is a 30-semester-credit program that serves classroom educators in the middle grades who are interested in meeting the developmental and educational needs of young adolescents (ages 10–14), usually organized in schools with at least a grade seven. The program curriculum is based on the standards for Middle Level Teacher Preparation approved by the National Middle School Association and NCATE, as well as the National Board for Professional
Teaching Standards. This specialization is designed to meet the needs of teachers whose initial preparation was focused on the elementary school or the high school, the primary trend for many years. Program content focuses on the research and best practices related to young adolescent development, organizational structures for high-success middle grades schools, the middle grades curriculum continuum, pedagogy and assessment for student success, middle grades teaching content, connecting with families and community, and leadership in the learning organization. Graduates are prepared to better meet the needs of young adolescents in their own classrooms and to become change agents and leaders for the reforms that need to occur in their schools and communities. The specialization is offered in a prescribed sequence.

Specialization Courses (24 sem. cr.)
EDUC 6000  Success Strategies in the Online Environment (non-credit)
EDUC 6510  Young Adolescent Development and Implications in a Global Society (3 sem. cr.)
EDUC 6520  Organizational Structures for High-Performing Middle Grades Schools (3 sem. cr.)
EDUC 6525  Concepts of Technology (3 sem. cr.)
EDUC 6530  The Middle Grades Curriculum Continuum (3 sem. cr.)
EDUC 6540  Pedagogy and Exemplary Practices for Learning in the Middle Grades (3 sem. cr.)
EDUC 6550  Assessment and Evaluation as Tools for Student Success (3 sem. cr.)
EDUC 6560  Arts Education for the Middle Level Educator (3 sem. cr.)
EDUC 6565  Middle Level Professional Roles (3 sem. cr.)

Teaching Fields Content (6 sem. cr.)
Students select two of the following:
EDUC 6561  Mathematics for Middle Level Teachers (3 sem. cr.)
EDUC 6562  Understanding and Teaching the Language Arts (3 sem. cr.)
EDUC 6563  Science for Middle Level Teachers (3 sem. cr.)
EDUC 6564  Understanding and Teaching the Social Studies (3 sem. cr.)

Course Sequence
First Semester
EDUC 6000  Success Strategies in the Online Environment
EDUC 6510  Young Adolescent Development and Implications in a Global Society

Second Semester
EDUC 6520  Organizational Structures for High-Performing Middle Grades Schools
EDUC 6525  Concepts of Technology

Third Semester
EDUC 6550  Assessment and Evaluation as Tools for Student Success
EDUC 6565  Arts Education for the Middle Level Educator

Fourth Semester
Students select two of the following courses. (Students may take one course in each of two 8-week sessions or may take both courses during one 8-week session.)

EDUC 6561  Mathematics for Middle Level Teachers
or
EDUC 6562  Understanding and Teaching the Language Arts
The Middle Level Education (Grades 5–8) specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult www.degrees4educators.com.

Science (Grades K–8) Specialization

The Science (Grades K–8) specialization is a 33-semester-credit program designed to help teachers improve their own science content skills, which should lead to more effective teaching of science. The program is based on the standards of the National Science Teachers Association and comprises an introductory three-credit course and five 6-credit modules in which students receive three credits in science and three credits in education. Each module focuses on a particular science domain. Participants engage in scientific investigations to extend their understanding of concepts and skills, rethink teaching and assessment strategies, and try ideas in their own classrooms—in essence, a built-in practicum.

Each course module is taught by two faculty in one online classroom. The two faculty are (1) a scientist well-versed in the science domain of a given module who guides participants in their acquisition of key science content, skills, and values; and (2) a science educator who supports participants as they consider pedagogical strategies for bringing science inquiry into their classrooms.

Core Courses (15 sem. cr.)
EDUC 6652 Listening to Children’s Ideas (3 sem. cr.)
EDUC 6654 Classroom Facilitation (3 sem. cr.)
EDUC 6656 Curriculum Designed for Understanding (3 sem. cr.)
EDUC 6658 Formative Assessment: Assessment for Learning (3 sem. cr.)
EDUC 6660 Investigating Equitable Classrooms (3 sem. cr.)

Specialization Courses (18 sem. cr.)
SCIE 6650 Try Science (3 sem. cr.)
SCIE 6651 Investigating Physics: Motion and Forces (3 sem. cr.)
SCIE 6653 Biology Explorations: Explorations in Variation, Diversity, and Adaptation (3 sem. cr.)
SCIE 6655 Earth Science From a New Perspective (3 sem. cr.)
SCIE 6657 Ecology: Organisms, Nutrients, and the Environment (3 sem. cr.)
SCIE 6659 Engineering: From Science to Design (3 sem. cr.)

Course Sequence
First Semester
SCIE 6650 Try Science
Second Semester
SCIE 6651  Investigating Physics: Motion and Forces
EDUC 6652  Listening to Children’s Ideas

Third Semester
SCIE 6653  Biology Explorations: Explorations in Variation, Diversity, and Adaptation
EDUC 6654  Classroom Facilitation

Fourth Semester
SCIE 6655  Earth Science From a New Perspective
EDUC 6656  Curriculum Designed for Understanding

Fifth Semester
SCIE 6657  Ecology: Organisms, Nutrients, and the Environment
EDUC 6658  Formative Assessment: Assessment for Learning

Sixth Semester
SCIE 6659  Engineering: From Science to Design
EDUC 6660  Investigating Equitable Classrooms

The Science (Grades K–8) specialization is a semester-based curriculum and, therefore, has a different academic calendar and procedures than the university’s quarter-based curricula. For more details on this specialization, call 888-627-1153 or consult www.degrees4educators.com

Policies
Students enrolled in any of the M.S. in Education specializations should refer to the M.S. in Education Student Guide (www.WaldenU.edu/mseducguide) for complete information on the program and other university policies and procedures related to these specializations. The policies and procedures listed below should be particularly noted.

Application Materials
Application materials for these specializations should be requested by calling 888-627-1153 or can be downloaded at www.degrees4educators.com.

Transfer of Credit
For the master’s programs in education, a maximum of nine semesters credits can be transferred: three courses of three semester credits each, to align with specialization courses. To be considered for acceptance in transfer from a U.S. institution, credits must meet the following criteria:

- Earned within 5 years prior to matriculating in the Walden University program or earned after matriculation and within the time limit for earning the degree.
- Transcripted as graduate credits on an official graduate transcript.
- Earned from an institution regionally accredited at the time the credits were earned.
- Earned in courses posting grades of B or higher (3.0 on a 4.0 grading scale).
- Earned in courses with content equivalent to the content of the corresponding Walden University courses or with content that is considered by Walden University to enhance the student’s education.
Approved in advance of the student taking the course, for those courses completed after matriculating as a Walden student.
Not applied to any prior earned degree.

To be considered for acceptance in transfer, graduate credits or other units from foreign institutions must satisfy the criteria above and have been earned from an internationally recognized university.

**Process for Transfer of Credit**

To apply for transfer credits, students must submit a credit-transfer request to the admissions office with their program application materials, or following admission to the program. Credit-transfer applications must be submitted and approved in advance (i.e., prior to enrolling in the course that will be transferred) for courses completed after matriculating as a Walden student.

The request must include a completed *Transfer of Credit Application* form and photocopies of catalog descriptions for the courses the student wants to transfer into the Walden University program. The university reserves the right to require copies of course syllabi in cases where catalog descriptions are not sufficient means to assess course content. Students should immediately request that an official transcript of the courses being considered for transfer be sent to Walden University. A transfer-of-credit decision cannot be made without an official transcript. Students requesting transfer of credits earned in foreign institutions may be required to submit the relevant material to an external credit evaluation service prior to Walden University making a judgment on the credit-transfer request.

Credit-transfer requests are reviewed and evaluated by the admissions office and program administrators when necessary. Once a decision is reached, the university notifies the student and records the decision in the student’s file.

**Registration**

Students in these specializations are automatically registered for courses following formal admission to the program and just prior to matriculation. The specializations are offered in a prescribed sequence as described in this catalog and the M.S. in Education *Student Guide* (www.WaldenU.edu/mseducguide).

**APA Guidelines**

All written work in these specializations must adhere to the format and style guidelines established by the American Psychological Association (APA), as described in the latest edition of the *Publication Manual of the American Psychological Association*.

**M.S. to Ph.D. Matriculation Requirements**

M.S. in Education students preparing to matriculate from the Integrating Technology in the Classroom (Grades 3–12) specialization to the Educational Technology specialization of the Ph.D. in Education will complete a minimum of 72 quarter credits in the Ph.D. program.

Other articulation arrangements are available for students who want to apply credit from a Walden M.S. in Education degree program toward one of the Walden Ph.D. specializations.
Doctor of Education (Ed.D.)

Walden’s Ed.D. program has two specializations in leadership: Teacher Leadership and Administrator Leadership for Teaching and Learning. Both are semester-based programs designed for educators who want to continue their practice while assuming leadership roles in their schools and communities.

Program Goals

Students completing the Ed.D. program will

• make an original contribution to the field of education,
• influence public debates related to children’s education,
• challenge assumptions related to critical educational issues of the day,
• conduct intellectual examinations of assumptions,
• demonstrate passionate beliefs in ideas,
• model lifelong learner characteristics, and
• collaborate with professional colleagues and others.

Program Performance Threads and Outcomes

The curricular framework of the Ed.D. program is built upon four performance threads and outcomes. While these performance threads and outcomes are woven throughout the program, they are most prevalent in the Proseminars.

• The performance thread is the action theme that drives the content, process, and product of students’ studies in this program.
• Outcomes are the behaviors that students will be engaged in that provide evidence for the performance thread.

It is expected that students in the Ed.D. program will develop expertise in the following performance threads and outcomes to promote equity and excellence in student achievement:

Performance Thread I: Acquiring an inquiry stance
Outcome: Inquire into learning, teaching, and leading from the perspective of an educator-researcher and educator-scholar to inform learning, achievement, and educational practices.

Performance Thread II: Synthesizing and applying theories and practices of personal and professional development with self, colleagues, and the global community
Outcome: Develop understandings and use of theories about educator learning, teaching for understanding, leadership, and lifelong educator professional development to influence state-of-the-art, contextual professional development programming for professional colleagues and the larger community.

Performance Thread III: Influencing, advocating, and contributing to communities of professional practice within schools and in the global community
Outcome: Lead communities of educator-learners engaged in reflexive praxis, decision-making, and the social processes of active participation in practitioner inquiry to inform and improve learning for children.
Performance Thread IV: Contributing to the professional body of knowledge to address and influence educational problem-solving and decision-making

Outcome: Produce original works applicable for educational reculturalization to influence positive social change through democratic processes in schools and the professional and global communities.

Embedded within the program design are standards developed by the Interstate School Leaders Licensure Consortium and the National Staff Development Council. Students must have access to a classroom learning environment for inquiry into and refinement of personal teaching talent.

Specializations

- Administrator Leadership for Teaching and Learning
- Teacher Leadership

Degree Requirements

- 54 semester credits
- Foundation course (6 sem. cr.)
- Proseminars (18 sem. cr.)
- Research Sequence (18 sem. cr.)
- Doctoral study (12 sem. cr.)
- Attendance at 3 residencies

Curriculum

Administrator Leadership for Teaching and Learning Specialization

The specialization in Administrator Leadership for Teaching and Learning is designed for administrators who desire to develop the knowledge, abilities, and dispositions of researchers, scholar-practitioners, and teacher-educators, and to be recognized as educational scholar-practitioners in their own right. The curriculum is founded on continual leadership development and renewal as a professional educator in regard to administrative leadership. The program provides an opportunity for administrative leaders to learn, embrace, and act upon becoming powerful agents of change in reforming schools and other organizations.

Foundation Course (6 sem. cr.)
EDAD 8001  Foundations for Doctoral Study (6 sem. cr.)

Proseminars (18 sem. cr.)
EDAD 8011  Proseminar: Leading to Promote Learning (6 sem. cr.)
EDAD 8021  Proseminar: Leading Communities of Practice (6 sem. cr.)
EDAD 8031  Proseminar: Leading for Social Change (6 sem. cr.)

Research Sequence (18 sem. cr.)
EDAD 8015  Research Approaches (6 sem. cr.)
EDAD 8025  Quantitative Research (6 sem. cr.)
EDAD 8035  Qualitative Research (6 sem. cr.)
**Doctoral Study (12 sem. cr.)**
EDAD 8090  Doctoral Study Intensive (12 sem. cr.)

**Course Sequence by Semester**

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<tr>
<th>Semester</th>
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<tbody>
<tr>
<td>1</td>
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<td>6</td>
<td>EDAD 8031  Proseminar: Leading for Social Change (6 sem. cr.)</td>
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<tr>
<td>7*</td>
<td>EDAD 8035*  Qualitative Research (6 sem. cr.)</td>
</tr>
<tr>
<td>8</td>
<td>EDAD 8090  Doctoral Study Intensive (6 sem. cr.)</td>
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<tr>
<td>9</td>
<td>EDAD 8090  Doctoral Study Intensive – continued (6 sem. cr.)</td>
</tr>
</tbody>
</table>

*EDAD 8025 and EDAD 8035 can be taken in any order. Students, in consultation with their mentors, will determine during EDAD 8021 which course is initially instrumental for their doctoral study.

**Teacher Leadership Specialization**

The specialization in Teacher Leadership focuses on the “educator as leader” and empowers experienced educators to effect change and improve learning. This degree program explores leadership in learning and teaching. Unlike doctoral programs that are designed to lead instructional professionals out of the learning setting into positions as principals, superintendents, or other administrators, this degree is intended for educators whose aspirations are to perfect the art and science of teaching and to use their talents where they matter most—to improve learning among students in the classroom and to impact conditions for learning at the school, district, community, and state levels.

**Foundation Course (6 sem. cr.)**
EDUC 8000  Foundations for Doctoral Study (6 sem. cr.)

**Proseminars (18 sem. cr.)**
EDUC 8010  Proseminar: Leadership in Teaching and Learning (6 sem. cr.)
EDUC 8020  Proseminar: Teacher Leadership in the School (6 sem. cr.)
EDUC 8030  Proseminar: Teacher Leadership Beyond the School (6 sem. cr.)

**Research Sequence (18 sem. cr.)**
EDUC 8015  Research Approaches (6 sem. cr.)
EDUC 8025  Quantitative Research (6 sem. cr.)
EDUC 8035  Qualitative Research (6 sem. cr.)

**Doctoral Study (12 sem. cr.)**
EDUC 8090  Doctoral Study Intensive (12 sem. cr.)
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</table>

*EDUC 8025 and EDUC 8035 can be taken in any order. Students, in consultation with their mentors, will determine during EDUC 8020 which course is initially instrumental for their doctoral study.

## Residency Requirements

The Ed.D. residency program allows students the opportunity to experience both face-to-face and online interactions, providing the foundation, stimulus, and direction for the intended outcomes of their degree program. These core questions guide students in the Ed.D. residencies:

- How can I develop my scholarly reading, writing, critiquing, and dialogue skills?
- How can I establish a balance (face-to-face and online) that enhances and extends my scholarly and research community?
- How can I fulfill both my personal and university goals?
- How can I integrate and align program standards and outcomes as evidence of my learning?

Ed.D. students must complete the following three residencies, one during each year of the program.

## Residency 1: Face-to-Face Introductory Residency

During the first year of the program, preferably within the first 9 months, students register for and attend a 3-day session—at the university’s Summer Session (July), Winter Session (January), or another designated Ph.D. residency. Which face-to-face residency is best to attend depends on the student’s date of enrollment.

The introductory residency is a face-to-face program that embeds an introduction to the Ed.D. program within an orientation to Walden University. This residency focuses on preparing students to design and implement a doctoral study, by introducing them to the skills they will need for success in the doctoral program. Students will participate in a series of large-group colloquia and critical-skills seminars focused on library research skills, scholarly writing, constructivism, logic and reasoning, research, and inquiry questioning. The introductory residency is typically scheduled Thursday through Sunday to minimize the time students need to be away from their schools or organizations. Students must register for housing through the residencies office.
**Residency 1 Objectives**

- To gain an understanding of the expectations/outcomes of Walden University and the Ed.D. program.
- To gain an understanding of the services, policies, and procedures of Walden University and the Ed.D. program.
- To continually develop the scholarly skills necessary to ensure successful completion of the doctoral program.
- To meet, establish, and sustain a scholarly research network within the university.

**Residency 2: Online Synchronous Residency**

During the second year of the program, the online residency provides students the unique opportunity to participate in an intensive online learning experience, in either April or November. The residency consists of two successive weekends, with a week of intensive individual work in between. The residency will be distinctly different from students’ online courses; the content will focus on actually conducting a doctoral study.

**Residency 2 Objectives**

- To understand and plan to implement the policies and procedures required for the doctoral study.
- To apply the theories and practices of social change to the doctoral study process.
- To explore, discuss, and critique research models and designs.
- To explain, support, and/or defend the doctoral study topic to colleagues.

**Residency 3: National Conference Residency**

In the third year of the Ed.D. program, the national conference residency is a culminating activity. In this residency, students attend a national or international conference with other students and a faculty member to present part or all of their doctoral study. Students will choose from among an approved list of professional conferences. The doctoral study need not be complete at the time of the presentation, but a publishable paper concerning the study or some aspect of it must be completed.

**Residency 3 Objectives**

- To develop and submit a presentation proposal of the doctoral study for a national (or international) conference.
- To network with colleagues at a global level.
- To establish strong communication and presentation skills.
- To evaluate own and others’ presentations to enhance advocacy and communication skills.
Ph.D. in Education

The Ph.D. in Education is a 134-credit program that is research-based and produces leaders who can address the nation’s most pressing educational challenges. Educators are expected to come to the program with defined learning goals and challenges and to participate in designing their own Program of Study. A General Program and specializations in seven established and newly emerging fields are available. For students whose particular learning interests are not met by one of the specializations or whose interests are interdisciplinary, the College of Education also offers an option that allows students to self-design a specialization to meet their unique needs.

The Ph.D. in Education program requires mastery of knowledge in three areas, including the foundational social and behavioral sciences, scientific inquiry and research methodology, and the student’s specialized field chosen from a broad range of professional education studies. Students select their specialization at the outset of their program and complete their doctoral program by conducting original research and writing a results-oriented dissertation that demonstrates command of the discipline.

Specializations

- General Program
- Adult Education Leadership
- Community College Leadership
- Early Childhood Education
- Educational Technology
- Higher Education
- K–12 Educational Leadership
- Special Education
- Self-Designed

Degree Requirements

- 134 quarter credits minimum
- Foundation course: SBSF 8005 (6 cr.)
- KAMs and/or courses, and Research Sequence (98 cr.)
- Satisfactory progress in all SBSF 7100 registrations
- Proposal, dissertation, and oral presentation (30 cr.)
- 20 days of residency (two 4-day and two 6-day residencies)
- Minimum 8–10 quarters enrollment

Core Curriculum

The core curriculum comprises a Foundation course in doctoral studies, three Knowledge Area Modules (KAMs), and the Research Sequence.
Foundation Course (6 cr.)

SBSF 8005 Foundations for Doctoral Study (6 cr.)
All beginning Ph.D. in Education students are required to successfully complete this course, and are automatically enrolled in it during their first month. In this course, students develop a Professional Development Plan and a Plan of Study to guide the rest of their program.

Core KAMS I–III (42 cr.)
Core KAMs provide a foundation of knowledge and prepare students to enhance their professional practice in a constantly changing environment.

Core KAM I: Principles of Societal Development (14 cr.)
As individuals and as professionals facing contemporary challenges, we must understand the contexts within which change takes place in our society, the variety of forces that operate to bring about change, the consequences of change, and our own role as change agents. Students examine the complex nature of societal change from the perspective of a variety of disciplines, including philosophy, ethics, sociology, psychology, economics, political science, anthropology, history, and futuristics, and then apply that knowledge through practical demonstration.

Breadth: SBSF 8110 Theories of Societal Development (5 cr.)
Depth: SBSF 8120 Current Research in Societal Development (5 cr.)
Application: SBSF 8130 Professional Practice and Societal Development (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)
KAM II allows students to explore human development from a variety of perspectives, including those defined by biology, anthropology, and psychology. They examine how culture (e.g., race, nationality, ethnicity, social class, sex, sexual orientation, and disability) influences human development, and they come to know the individual as part of a larger context in a multicultural society.

Breadth: SBSF 8210 Theories of Human Development (5 cr.)
Depth: SBSF 8220 Current Research in Human Development (5 cr.)
Application: SBSF 8230 Professional Practice and Human Development (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
KAM III asks students to examine social systems theory to see how different parts of a system interact and to better analyze and understand education in the context of the larger society. The primary models of structured system theories are presented as a background and theoretical framework for other knowledge areas.

Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)
Depth: SBSF 8320 Current Research in Organizational and Social Systems (5 cr.)
Application: SBSF 8330 Professional Practice and Organizational and Social Systems (4 cr.)
Research Sequence (28 cr.)

**Core Research Sequence (19 cr.)**
The four courses in the Core Research Sequence are conducted online, requiring weekly participation in discussions and assignments. Course faculty guide discussions, require specific readings, and evaluate assignments.

- SBSF 8417  Research Seminar I: Human Inquiry and Science (4 cr.)
- EDUC 8428  Research Seminar II: Design in Educational Research (5 cr.)
- EDUC 8438  Research Seminar III: Quantitative Research in Education (5 cr.)
- EDUC 8448  Research Seminar IV: Qualitative Research in Education (5 cr.)

**Advanced Research Sequence (9 cr.)**
The two courses in the Advanced Research Sequence are conducted as independent studies under the guidance of the faculty mentor or the dissertation chair. The purpose of these courses is to lead into the dissertation study by field testing the research approach and presenting the initial results. Students prepare a plan for the study that is submitted and evaluated by the faculty member before the study begins. The final study for both courses is assessed by the faculty member. These two courses are undertaken consecutively and relate to the dissertation/study project.

- EDUC 8458  Advanced Research: Conducting Pilot and Field Studies (5 cr.)
- EDUC 8468  Advanced Research: Communicating Knowledge in Educational Research (4 cr.)

**Specialized Curriculum**
The General Program and the specializations in Adult Education Leadership, Community College Leadership, Early Childhood Education, Higher Education, and Special Education include specialized KAMs (V and VI) and are designed to allow students to focus on theoretical issues within their chosen disciplines. Through research, students compare contemporary professional practices, strategies, and ethics.

The Community College Leadership and K–12 Educational Leadership specializations allow a practicum to be taken in place of the Advanced Research Sequence. The specialization in K–12 Educational Leadership uses a specialized curriculum that includes 28 credits of online coursework instead of specialized KAMs.

The specialization in Educational Technology, which is designed to reflect the International Society for Technology in Education standards in Technology Facilitation and Technological Leadership, uses a specialized curriculum that includes 37 credits of online coursework in place of specialized KAMs and the Advanced Research Sequence.

**General Program**
The General Program is intended for students whose professional practice and career goals cover a range of educational topics or are interdisciplinary, combining specific education subjects with complementary subjects from the social and behavioral sciences or the humanities.
SBSF 8005 Foundations for Doctoral Study (6 cr.)

Core KAMs I–III as described under the Core Curriculum (42 cr.)

Core Research Sequence as described under the Core Curriculum (19 cr.)

Specialized KAM V: Theories of Intelligence, Learning, and Motivation (14 cr.)
This KAM examines theoretical foundations of the learning process with its associated phenomena, such as intelligence, cognition, motivation, and their implications for educators. Students demonstrate mastery of classical and contemporary theory and research knowledge as background for use in teaching, and learning facilitation of, students in a range of educational settings.

Breadth: EDUC 8510  Theories of Intelligence, Learning, and Motivation as a Basic Praxis (5 cr.)
Depth: EDUC 8520  Educators as Facilitators of Learning for Diverse Populations (5 cr.)
Application: EDUC 8530  Professional Practice Using Learning Theories (4 cr.)

Specialized KAM VI: Learning Institutions: Organization, Purpose, Goals, and Missions (14 cr.)
This KAM examines critical issues in the organization and planning of learning institutions. Students research and identify principles of effective practice, identify and sharpen skills in planning and implementing instructional programs, and develop educational leadership abilities.

Breadth: EDUC 8610  The Organization of Learning Institutions (5 cr.)
Depth: EDUC 8620  Social Change in Learning Institutions and Curricula (5 cr.)
Application: EDUC 8630  Creating and Implementing Educational Change (4 cr.)

Advanced Research Sequence as described under the Core Curriculum (9 cr.)

Dissertation (30 cr.)
EDUC 9000  Dissertation (30 cr.)

Adult Education Leadership Specialization
The historical roots of social change are grounded in adult education. This specialization is designed for educators who want to think broadly about the field of adult education, whether in community-based settings, schools, government, or the private sector. The specialization guides students in understanding the interdisciplinary nature of adult education as a field of study, principles of adult learning and development, and the impact of adult educators on organizations and communities in which they work.

SBSF 8005 Foundations for Doctoral Study (6 cr.)

Core KAMs I–III as described under the Core Curriculum (42 cr.)

Specialized KAM V: Principles of Adult Education (14 cr.)
This KAM examines the adult learner through historical, philosophical, and psychosocial principles, with a focus on the interdisciplinary nature of adult education. Students demonstrate mastery of theory and
research knowledge for application in a range of community educational settings, including those outside the United States.

*Breadth:* EDUC 8514 Interdisciplinary Foundations and Theory in Adult Education and Learning (5 cr.)
*Depth:* EDUC 8524 Current Research in Adult Education and Learning (5 cr.)
*Application:* EDUC 8534 Professional Practice in Adult Learning (4 cr.)

**Specialized KAM VI: Critical Issues for Adult Education Leaders (14 cr.)**
This KAM examines the role of the adult education leader within the economic, social, political, and organizational environments. Students research the integration of adult learning theory with program planning and management in a variety of contexts, including community development, educational institutions, business, government, and nonprofit organizations.

*Breadth:* EDUC 8614 Principles for Adult Education Leaders (5 cr.)
*Depth:* EDUC 8624 Current Research in Program Planning and Delivery (5 cr.)
*Application:* EDUC 8634 Professional Practice for Adult Education Leaders (4 cr.)

**Core Research Sequence as described under the Core Curriculum (19 cr.)**

**Advanced Research Sequence as described under the Core Curriculum (9 cr.)**

**Dissertation (30 cr.)**
EDUC 9000 Dissertation (30 cr.)

**Community College Leadership Specialization**
“Community colleges are facing an impending crisis in leadership.” This statement echoes throughout the community college literature of the last decade and is the opening sentence of an executive summary of a recent report from the American Association of Community Colleges (AACC). The magnitude of the crisis was highlighted in the results of a national Leadership Survey conducted by AACC in 2001 that found over 50 percent of community college presidents and an even higher percentage of senior administrators would be retiring by 2007.

Concurrently, America’s community colleges are undergoing profound changes as the student population shifts predominantly to mature, working adults and as the methods of teaching and learning change to electronic modes and other distance approaches. Students in the Community College Leadership specialization (whether from the perspective of president, academic leader, student services, technology specialist, specific area program officer, or other leadership position within the community college) will develop proficiency in knowing how individuals, particularly adults, learn most effectively, what tools and strategies best promote learning, and how educational systems and policies can be changed to promote the academic mission of the community college in today’s society.

**SBSF 8005 Foundations for Doctoral Study (6 cr.)**

**Core KAM I: Principles of Societal Development (14 cr.)**
*Breadth:* SBSF 8110 Theories of Societal Development (5 cr.)
*Depth:* EDUC 8122 Current Research on Social Change and Community Colleges (5 cr.)
*Application:* EDUC 8132 Professional Practice, Social Change, and Community Colleges (4 cr.)
Core KAM II: Principles of Human Development (14 cr.)
Breadth: SBSF 8210  Theories of Human Development (5 cr.)
Depth: EDUC 8222  Current Research in Human Development and Community Colleges (5 cr.)
Application: EDUC 8232  Professional Practice, Human Development, and Community Colleges (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
Breadth: SBSF 8310  Theories of Organizational and Social Systems (5 cr.)
Depth: EDUC 8322  Current Research on Social Systems and Community Colleges (5 cr.)
Application: EDUC 8332  Professional Practice, Social Systems, and Community Colleges (4 cr.)

Core Research Sequence as described under the Core Curriculum (19 cr.)

Specialized KAM V: The Contemporary Community College (14 cr.)
Breadth: EDUC 8512  Perspectives on the Role of the Community College (5 cr.)
Depth: EDUC 8522  Current Research on Trends in the Community College (5 cr.)
Application: EDUC 8532  Professional Practice and Current Trends in Community Colleges (4 cr.)

Specialized KAM VI: Leadership and Strategic Planning in the Community College (14 cr.)
Breadth: EDUC 8612  Perspectives on Leadership and Strategic Planning in Community Colleges (5 cr.)
Depth: EDUC 8622  Current Research on Leadership and Strategic Planning in Community Colleges (5 cr.)
Application: EDUC 8632  Professional Practice in Leadership and Strategic Planning in Community Colleges (4 cr.)

Advanced Research Sequence as described under the Core Curriculum (9 cr.)
or
Practicum (9 cr.)
EDUC 8883  Practicum in Community College Leadership (9 cr.)

Dissertation (30 cr.)
EDUC 9000  Dissertation (30 cr.)

Early Childhood Education Specialization
As the demographics of the family and workforce change, the nation is increasingly turning its attention to the critical need for early child development and education. The Early Childhood Education specialization guides students in developing the expertise to lead in the creation and implementation of new program practices, to apply emerging research on development in the early years, and to conceptualize new paradigms for early learning.

The core KAM curriculum in the foundational social and behavioral sciences is aimed at a range of unique early childhood topics and research perspectives.
SBSF 8005 Foundations for Doctoral Study (6 cr.)

Core KAM I: Principles of Societal Development (14 cr.)

*Breadth:* SBSF 8110 Theories of Societal Development (5 cr.)
*Depth:* EDUC 8123 Theoretical Foundations of Early Childhood Program Practices (5 cr.)
*Application:* EDUC 8133 Theory to Practice: Curriculum Contrasts and Implementation (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)

*Breadth:* SBSF 8210 Theories of Human Development (5 cr.)
*Depth:* EDUC 8223 Current Research: Psychological Foundations of Early Childhood Growth and Development (5 cr.)
*Application:* EDUC 8233 Psychological Considerations in Application to Early Childhood Programs (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)

*Breadth:* SBSF 8310 Theories of Organizational and Social Systems (5 cr.)
*Depth:* EDUC 8323 Early Childhood Education: Implications for Social and Organizational Systems (5 cr.)
*Application:* EDUC 8333 Professional Practice in Organizational and Social Contexts (4 cr.)

Core Research Sequence as described under the Core Curriculum (19 cr.)

Specialized KAM V: Theories of Intelligence, Learning, and Motivation in Early Childhood Education (14 cr.)

This KAM is an analysis of intelligence and motivation theories applicable to the child under 8 years of age. Implications for educators, political leaders, policy-makers, and early childhood advocates are examined. Fiscal policy and imperatives are explored in relation to programming for varied learning and motivational styles.

*Breadth:* EDUC 8513 Theories of Intelligence, Learning, and Motivation: Birth to Age 8 (5 cr.)
*Depth:* EDUC 8523 Early Childhood Program Delivery in a Multicultural/Multifaceted Society (5 cr.)
*Application:* EDUC 8533 Professional Practice Using Learning and Motivational Theory in Context (4 cr.)

Specialized KAM VI: Critical Issues in the Organization and Planning of Early Childhood Education Programs (14 cr.)

Critical issues are explored in the organization and planning of early childhood programs, including theoretical perspectives on early childhood education organization, developmentally appropriate practices, and environmental and advocacy issues in early childhood organizational contexts. Depth and application sections examine licensure and accreditation standards, role of federal and state governments, policy and resource allocation, cultural diversity, ramifications of current brain research for program development, and application of early childhood education programs with focus on theory, design, execution, and evaluation.

*Breadth:* EDUC 8613 Organization of Early Childhood Education Programs (5 cr.)
*Depth:* EDUC 8623 Critical Issues in Early Childhood Education Programs (5 cr.)
*Application:* EDUC 8633 Early Childhood Programs: A Comprehensive Approach (4 cr.)
Advanced Research Sequence as described under the Core Curriculum (9 cr.)

Dissertation (30 cr.)
EDUC 9000 Dissertation (30 cr.)

Educational Technology Specialization
Today, more than 90 percent of American schools and more than 60 percent of American classrooms are wired for Internet use. The Educational Technology specialization develops leaders who can effectively apply technology to learning and teaching in schools, school districts, and other learning environments. The curriculum guides students in becoming highly skilled in course development and delivery using technology, integration of technology in the curriculum, cognition and technology-based instruction, and the management of technology for improved learning.

SBSF 8005 Foundations for Doctoral Study (6 cr.)

Core KAMs I–III as described under the Core Curriculum (42 cr.)

Core Research Sequence as described under the Core Curriculum (19 cr.)

Specialization Courses (37 cr.)
EDUC 8806 Educational Measurement and Evaluation (4 cr.)
EDUC 8807 Curriculum Theory and Design (4 cr.)
EDUC 8812 Critical Survey of Technology (4 cr.)
EDUC 8813 Management of Technology for Education (4 cr.)
EDUC 8814 Learning Theories and Instructional Technology (4 cr.)
EDUC 8823 Computer Technology and Multimedia in Education (4 cr.)
EDUC 8824 Integration of Technology in the Curriculum (4 cr.)
EDUC 8825 Course Development and Delivery Utilizing Technology (4 cr.)
EDUC 8826 Planning and Implementing Instructional Technological Environments (5 cr.)

Dissertation (30 cr.)
EDUC 9000 Dissertation (30 cr.)

Higher Education Specialization
During the 21st century, colleges and universities will undergo profound transformations as the student population becomes older and more diverse, and as educational methods incorporate more technological solutions and distance approaches. Building on the foundational core KAMs in the social and behavioral sciences, the Higher Education curriculum emphasizes proficiency in understanding the needs of a changing clientele and academic community; analyzing and implementing strategies to promote learning and to support development in higher education; and learning how systems and policies can be used to assure organizational effectiveness and social change in postsecondary settings. Contexts for the study and practice of higher education include community colleges; private and public liberal arts colleges; distance-learning institutions; regional and state universities; proprietary, technical, and trade schools; state and federal agencies; and national professional associations.
SBSF 8005 Foundations for Doctoral Study (6 cr.)

**Core KAM I: Principles of Societal Development (14 cr.)**
- **Breadth:** SBSF 8110 Theories of Societal Development (5 cr.)
- **Depth:** EDUC 8127 Current Research in Higher Education, Social Change, and Development (5 cr.)
- **Application:** EDUC 8137 Professional Practice and Emerging Trends in Higher Education (4 cr.)

**Core KAM II: Principles of Human Development (14 cr.)**
- **Breadth:** SBSF 8210 Theories of Human Development (5 cr.)
- **Depth:** EDUC 8227 Current Research in Ways of Knowing and Individual Differences in Human Development (5 cr.)
- **Application:** EDUC 8237 Professional Practice and Human Development in Higher Education (4 cr.)

**Core KAM III: Principles of Organizational and Social Systems (14 cr.)**
- **Breadth:** SBSF 8310 Theories of Organization and Social Systems (5 cr.)
- **Depth:** EDUC 8327 Current Research in Social Systems and Change in Higher Education (5 cr.)
- **Application:** EDUC 8337 Professional Practice in Social Systems and Change: Higher Education (4 cr.)

**Core Research Sequence as described under the Core Curriculum (19 cr.)**

**Specialized KAM V: Learning and Development in Higher Education (14 cr.)**
This KAM addresses the theoretical foundations of higher education through a multidisciplinary approach. It focuses on the processes of learning and development, and the role of the educational environments in which they occur. This analysis includes identification and evaluation of techniques/methods that support student success. This knowledge is then applied to a selected area of practice in the academic community.

- **Breadth:** EDUC 8516 Multiple Perspectives on Learning and Development in Higher Education (5 cr.)
- **Depth:** EDUC 8526 Current Research on Learning and Development in Higher Education (5 cr.)
- **Application:** EDUC 8536 Application to Improve Professional Practice in Higher Education (4 cr.)

**Specialized KAM VI: Effectiveness of Higher Education Organizations (14 cr.)**
This KAM concerns effectiveness in higher education from the perspectives of constituents, providers, and regulators/evaluators. It focuses on the major approaches to demonstrating and assuring quality, as called for by external constituents and initiated by internal participants. Strategies for organizational effectiveness and accountability are reviewed and evaluated within the current climate of change. Evidence for the efficacy of various approaches to improvement is emphasized in an application to professional practice in higher education.

- **Breadth:** EDUC 8617 Perspectives on the Effectiveness of Higher Education Organizations (5 cr.)
- **Depth:** EDUC 8627 Contemporary Strategies for Assuring Effectiveness in Higher Education (5 cr.)
- **Application:** EDUC 8637 Application of Improvement Strategies in Higher Education (4 cr.)

**Advanced Research Sequence as described under the Core Curriculum (9 cr.)**

**Dissertation (30 cr.)**
EDUC 9000 Dissertation (30 cr.)
K–12 Educational Leadership Specialization

Second only to the impending teacher shortage in America is the developing shortage of educational leadership at school, district, and state levels. The K–12 Educational Leadership specialization provides a much-needed new model for advanced study in this field. A highly flexible, student-centered curriculum is designed to develop local, regional, and state educational leaders who can relate to diverse, multicultural K–12 and community-based school populations.

The core KAM curriculum in the foundational social and behavioral sciences is designed to advance scholar-practitioners in the area of educational leadership, organizational development, policy studies, and administration and management.

**SBSF 8005 Foundations for Doctoral Study (6 cr.)**

**Core KAM I: Principles of Societal Development (14 cr.)**

*Breadth: SBSF 8110 Theories of Societal Development (5 cr.)*
*Depth: EDUC 8128 Strategic Leadership in Education and Societal Development (5 cr.)*
*Application: EDUC 8138 Professional Practice in Strategic Leadership and Societal Development (4 cr.)*

**Core KAM II: Principles of Human Development (14 cr.)**

*Breadth: SBSF 8210 Theories of Human Development (5 cr.)*
*Depth: SBSF 8220 Current Research in Human Development (5 cr.)*
*Application: SBSF 8230 Professional Practice in Human Development (4 cr.)*

**Core KAM III: Principles of Organizational and Social Systems (14 cr.)**

*Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)*
*Depth: EDUC 8328 Current Research in Organizational and Social Systems: K–12 Education (5 cr.)*
*Application: EDUC 8338 Professional Practice in K–12 Educational Organization (4 cr.)*

**Core Research Sequence as described under the Core Curriculum (19 cr.)**

**Specialization Courses (28 cr.)**

EDUC 8801 Educational Law, Public Policy, and Political Systems (4 cr.)
EDUC 8802 Supervision, Evaluation, and Human Resources in Education (4 cr.)
EDUC 8803 Student Personnel Services (4 cr.)
EDUC 8804 School Financial Management (4 cr.)
EDUC 8805 Reflective Instructional Practice (4 cr.)
EDUC 8806 Educational Measurement and Evaluation (4 cr.)
EDUC 8807 Curriculum Theory and Design (4 cr.)

**Advanced Research Sequence as described under the Core Curriculum (9 cr.)**

or
EDUC 8811 Practicum in K–12 Leadership (9 cr.)

For advanced students seeking an administrative certificate or license.

**Dissertation (30 cr.)**

EDUC 9000 Dissertation (30 cr.)
Note on certification and licensure: Students undertaking the K–12 Educational Leadership specialization should possess a valid administrative credential or, in appropriate cases, they may seek to use the Walden University Ph.D. degree to satisfy certification/licensure requirements in their respective states. The specialization has been designed following both National Council for Accreditation of Teacher Education (NCATE) and the Interstate School Leaders Licensure Consortium (ISLLC) published standards for programs in educational leadership. Acceptance of the Walden University Ph.D. by individual states for the satisfaction of certification or licensure requirements rests with each state. Students are advised to consult directly with their state certification/licensure authority for further information. Walden University does not directly provide administrative certification or licensure in any state.

Special Education Specialization

Most K–12 educators are strong advocates for improved services for exceptional/disabled individuals. Unfortunately, resources for the delivery of these services are often far less than schools and school districts desire. This specialization guides advanced students in the acquisition of knowledge and resources necessary to provide leadership in the special education field and to better assist their own students in the self-actualization process. The curriculum emphasizes learning services for exceptional/disabled individuals and incorporates the related areas of special education administration, including law, finance, and ethics.

SBSF 8005 Foundations for Doctoral Study (6 cr.)

Core KAM I: Principles of Societal Development (14 cr.)

Breadth: SBSF 8110 Theories of Societal Development (5 cr.)
Depth: EDUC 8121 Current Research in Societal Development: Special Education (5 cr.)
Application: EDUC 8131 Professional Practice and Societal Development: Special Education (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)

Breadth: SBSF 8210 Theories of Human Development (5 cr.)
Depth: EDUC 8221 Current Research in Human Exceptionality (5 cr.)
Application: EDUC 8231 Professional Practice and Human Exceptionality (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)

Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)
Depth: EDUC 8321 Individuals With Special Needs: Social, Legal, Political, and Economic Systems in Context (5 cr.)
Application: EDUC 8331 Professional Issues in Organizations and Systems: Special Education (4 cr.)

Core Research Sequence as described under the Core Curriculum (19 cr.)

Specialized KAM V: Theories of Learning, Motivation, and Intelligence; and Implications for Persons With Special Needs (14 cr.)

KAM V covers traditional, current, and emerging theoretical underpinnings and principles of learning and exceptionality and related facets, as well as implications for educators within the context of inclusive or categorical settings.
Breadth: EDUC 8511  Theories and Principles of Human Learning and the Human Side of Exceptionalities (5 cr.)

Depth: EDUC 8521  Educators as Facilitators of Inclusive Learning in Varied Educational Environments (5 cr.)

Application: EDUC 8531  Educational Practice Grounded in Principles/Theories of Learning, Diversity, and Inclusion (4 cr.)

Specialized KAM VI: Institutional Contexts for Special Education: Leadership, Learning, and Accommodation (14 cr.)

This KAM reviews delivery models for special education services and their administration. Attention is focused on the dynamics of IEP team operation, eligibility criteria, assessment procedures, and community support systems with particular reference to compliance with law. Alternative and innovative models of leadership for special education programming are explored.

Breadth: EDUC 8611  Diversity and Exceptionality in Special Education: Leading Within Learning Organizations (5 cr.)

Depth: EDUC 8621  Due Process in Special Education: Legal and Moral Implications (5 cr.)

Application: EDUC 8631  Practical Issues in Placement and Service Delivery (4 cr.)

Advanced Research Sequence as described under the Core Curriculum (9 cr.)

Dissertation (30 cr.)

EDUC 9000  Dissertation (30 cr.)

Self-Designed Specialization

Some educators are interested in fields that are just emerging and are not yet recognized as areas of specialization. The Self-Designed specialization, working within the rubric provided by the General Program, allows such individuals to create a program of study that is clearly focused on new and emerging ideas and practices. Examples include, but are not limited to, K–12 curriculum and instruction, second language learning, community college teaching, mathematics education, science education, adult literacy, international education, middle level education, music and arts education, and vocational education.

Declaring a Self-Designed Specialization

Students exercising this option design and declare the specialization in conjunction with the development of the Professional Development Plan. The Professional Development Plan must clearly reflect how the student intends to integrate the self-designed specialization into the depth and application sections of all the KAMs, as well as the dissertation. The breadth component of the specialized KAMs must also support the specialization; however, the breadth component of the core KAMs is not used to support specializations. Students should complete the Program of Study form using the education General Program specialization course numbers for the breadth, depth, and application components of each KAM. The depth and application components should include a subtitle that reflects the focus of the student’s own unique self-designed specialization. In the specialized KAMs, the titles of the breadth component must also reflect the unique, self-designed specialization.
Completing a Self-Designed Specialization

To complete a self-designed specialization, students follow the course of study outlined in the Professional Development Plan, demonstrating doctoral-level competency in all academic work in the specialization area. Academic work that does not adequately support the declared specialization will be returned to the student for revision.
The NTU College’s Master of Business Administration (High-Tech M.B.A.) program is designed to teach engineers, scientists, and computer professionals “the business of business,” in diverse areas ranging from accounting to organizational behavior—preparing them to be leaders in today’s technology-based businesses. The program, through unique case studies and coursework that relate to the rapidly changing world of technology, provides students the opportunity to learn about the analytical, technical, and behavioral tools that are used to address management challenges typical of technology-based businesses. It also emphasizes the people skills that are often neglected in technical programs.

The High-Tech M.B.A. program is intended to meet the needs of a broad and unique population of working technical managers and supervisors. The core courses emphasize the needs and skills sets of engineers and technical professionals and include these threads to further develop students’ business skills:

- Change Management
- Communication and Collaboration
- Networking
- Constituency Awareness
- Decision-Making
- Ethics
- Managing Distance

### Degree Requirements

- 36 semester credits
- Core courses (18 sem. cr.)
- Program elective courses (12 sem. cr.)
- General elective courses (6 sem. cr.)

### Curriculum

The High-Tech M.B.A. is a 36-semester-credit program. Students complete a core set of six courses that provide a foundation in the theories and concepts relevant to business and management. Then, four program elective courses build on the core content and allow students to select coursework that more closely meets their specific needs and goals. Finally, students select any two graduate-level courses as general electives to complete their degree requirements.

*Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.*
Core Curriculum (18 sem. cr.)
NMBA 6120 (NB 720) Organizational Behavior: Working Within the Equations of State (3 sem. cr.)
NMBA 6130 (NB 721) Leadership and Teamwork: Accomplishing Momentum Transfer Using Power, Influence, and Collaboration (3 sem. cr.)
NMBA 6140 (NB 740) Strategy and Negotiation: Solving the Boundary Value Problem (3 sem. cr.)
NMBA 6150 (NB 710) Technology and Operations: Moore’s Law and Other Business Accelerators (3 sem. cr.)
NMBA 6160 (NB 730) Marketing: Maximizing the Organizational I/O Bus (3 sem. cr.)
NMBA 6170 (NB 750) Finance and Accounting: Measurement and Flow Control for the Economic Engine (3 sem. cr.)

Program Elective Courses (12 sem. cr.)

Students select four of the following:
NMBA 6313 (MG 723) Supply Chain Management (3 sem. cr.)
NMBA 6336 (MG 726) Global Competitive Environment (3 sem. cr.)
NMBA 6351 (MG 770) Legal Environment of Business (3 sem. cr.)
NMGT 6310 (MB 710) Introduction to Engineering Management (3 sem. cr.)
NMGT 6760 (TO 760) Introduction to Project Management (3 sem. cr.)
NMGT 6761 (TO 761) Advanced Project Management (3 sem. cr.)
NMGT 8735 (TO 735) Marketing of Advanced Technologies (3 sem. cr.)
NMGT 8750 (TO 750) Total Quality Management and Improvement (3 sem. cr.)

General Elective Courses (6 sem. cr.)
Students select any two graduate-level courses.

M.S. in Computer Engineering

Computer engineers design computers and computer systems, apply computers as components of larger systems, and apply digital techniques to solve a broad range of engineering problems. The M.S. in Computer Engineering program prepares students to work in the dynamic and rapidly expanding field of digital technology.

Degree Requirements

- 30 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (9 sem. cr.)
- General elective courses (6 sem. cr.)

Curriculum

The M.S. in Computer Engineering is a 30-semester-credit program. Students complete a core set of five courses that provide a foundation in the theories and concepts relevant to computer engineering. Then, students choose three program elective courses that build on the core content and are relevant to their
specific needs and goals. Finally, students select any two graduate-level courses as general electives to complete their degree requirements.

Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.

Core Courses (15 sem. cr.)
NCSC 6101 (CS 740) Operating Systems Principles (3 sem. cr.)
NCSC 6331 (CA 722) Computer Networks I (3 sem. cr.)
NEEI 6341 (IC 541) Introduction to Digital Integrated Circuits (3 sem. cr.)
NEEP 6111 (CA 714) Computer Architecture (3 sem. cr.)
NEEP 6221 (DS 510) Digital ASIC Design (3 sem. cr.)

Program Elective Courses (9 sem. cr.)
Students select three of the following:
NCSC 6031 (CA 720) Introduction to Parallel Computing (3 sem. cr.)
NCSC 6831 (CS 765) Distributed Computing Systems (3 sem. cr.)
NEEC 6525 (CC 718) Wireless Networks (3 sem. cr.)
NEEC 6551 (CC 560) Digital Signal Processing I (3 sem. cr.)
NEEI 6321 (CR 526) Analysis of Electronic Circuits (3 sem. cr.)
NEEP 6271 (DS 770) Testing and Diagnosis of VLSI Systems (3 sem. cr.)
NEEP 8221 Advanced Digital Design (3 sem. cr.)

General Elective Courses (6 sem. cr.)
Students select any two graduate-level courses.

Thesis Option
This program does not require a thesis. However, a thesis option (maximum of six semester credits) is available and may be substituted for the general elective courses upon consultation with an advisor.

Foundation Courses
Foundation courses are available for those students who do not have adequate preparation to begin the master’s program. Foundation courses for students entering graduate study in Computer Engineering are available in topical areas.

M.S. in Computer Science
Computer science is the body of knowledge dealing with the design, analysis, implementation, efficiency, and application of algorithmic processes that transform information. It deals with software, operating systems, programming languages, and other related areas.
Degree Requirements

- 30 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (9 sem. cr.)
- General elective courses (6 sem. cr.)

Curriculum

The M.S. in Computer Science is a 30-semester-credit program. Students complete a core set of five courses that provide a foundation in the theories and concepts relevant to computer science. Then, students choose three program elective courses that build on the core content and are relevant to their specific needs and goals. Finally, students select any two graduate-level courses as general electives to complete their degree requirements.

Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.

Core Courses (15 sem. cr.)

Students select five of the following:
- NCSC 6021 (AD 720) Analysis of Algorithms (3 sem. cr.)
- NCSC 6101 (CS 740) Operating Systems Principles (3 sem. cr.)
- NCSC 6121 (CS 720) Programming Language Principles (3 sem. cr.)
- NCSC 6331 (CA 722) Computer Networks I (3 sem. cr.)
- NCSC 6401 (CS 750) Database Management Systems (3 sem. cr.)
- NCSC 8011 (AD 711) Advanced Data Structures (3 sem. cr.)

Program Elective Courses (9 sem. cr.)

Students select three of the following (or two of the following and the remaining core course):
- NCSC 6031 (CA 720) Introduction to Parallel Computing (3 sem. cr.)
- NCSC 6321 (ST 754) Internet Protocols (3 sem. cr.)
- NCSC 6333 (ST 759) Data Communication Networks (3 sem. cr.)
- NCSC 6431 (CS 755) Distributed Database Systems (3 sem. cr.)
- NCSC 6461 (CS 759) Data Mining (3 sem. cr.)
- NCSC 6831 (CS 765) Distributed Computing Systems (3 sem. cr.)
- NEEP 6111 (CA 714) Computer Architecture (3 sem. cr.)

General Elective Courses (6 sem. cr.)

Students select any two graduate-level courses.

Thesis Option

This program does not require a thesis. However, a thesis option (maximum of six semester credits) is available and may be substituted for the general elective courses upon consultation with an advisor.
Foundation Courses

Foundation courses are available for those students who do not have an adequate preparation to begin the master’s program. Foundation courses for students entering graduate study in Computer Science are available in topical areas.

M.S. in Electrical Engineering

The M.S. in Electrical Engineering program is designed to provide students with the technical background for the analysis, design, development, operation, or research of electrical or electronic systems.

Degree Requirements

- 33–34 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (12–13 sem. cr.)
- General elective courses (6 sem. cr.)

Curriculum

The M.S. in Electrical Engineering is a 33–34-semester-credit program. Students complete a core set of five courses that provide a foundation in topics basic to electrical engineering. Then, students choose four program elective courses that build on the core content and are relevant to their specific needs and goals. Finally, students select any two graduate-level courses as general electives to complete their degree requirements.

Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.

Core Courses (15 sem. cr.)

- NEEC 6501 (CC 714) Random Processes for Engineering Applications (3 sem. cr.)
- NEEC 6521 (CC 511) Communication Systems I (3 sem. cr.)
- NEEC 6551 (CC 560) Digital Signal Processing I (3 sem. cr.)
- NEEI 6301 (IC 520) Integrated Circuit Devices (3 sem. cr.)
- NEEI 6321 (CR 526) Analysis of Electronic Circuits (3 sem. cr.)

Program Elective Courses (12–13 sem. cr.)

Students select four of the following:
- NEEC 6525 (CC 718) Wireless Networks (3 sem. cr.)
- NEEC 6552 (CC 763) Digital Signal Processing II (3 sem. cr.)
- NEEI 6311 (IC 727) Semiconductor Device Modeling (3 sem. cr.)
- NEEI 6341 (IC 541) Introduction to Digital Integrated Circuits (4 sem. cr.)
- NEEM 6431 (IC 730) Microelectronics Processing I (3 sem. cr.)
- NEEP 6221 (DS 510) Digital ASIC Design (3 sem. cr.)
NEEP 6271 *(DS 770)*  Testing and Diagnosis of VLSI Systems (3 sem. cr.)
NEEP 8221  Advanced Digital Design (3 sem. cr.)

**General Elective Courses (6 sem. cr.)**
Students select any two graduate-level courses.

**Thesis Option**
This program does not require a thesis. However, a thesis option (maximum of six semester credits) is available and may be substituted for the general elective courses upon consultation with an advisor.

**Foundation Courses**
Foundation courses are available for those students who do not have an adequate preparation to begin the master’s program. Foundation courses for students entering graduate study in Electrical Engineering are available in topical areas.

**M.S. in Engineering Management**
The M.S. in Engineering Management has been designed with significant industry input to provide a broad technical management educational experience for engineers and other scientific professionals. Because the program requires some full-time work experience to fully profit from many of the courses, it is especially suited for engineers who are moving into a first management position or who already have some management experience.

**Degree Requirements**
- 33 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (9 sem. cr.)
- General elective courses (6 sem. cr.)
- Capstone course (3 sem. cr.)

**Curriculum**
The M.S. in Engineering Management is a 33-semester-credit program. Students complete a core set of five courses that provide a foundation in topics basic to engineering management. Then, students choose three program elective courses that build on the core content and are relevant to their specific needs and goals. Students round out the program with any two graduate-level courses. A final capstone course requires students to integrate and synthesize their experiences. Several course options are available, but all require some technical tools—including probability and statistics, operations research, accounting and finance, and project management.

*Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.*
Core Courses (15 sem. cr.)
NMBA 6120 (NB 720) Organizational Behavior: Working Within the Equations of State (3 sem. cr.)
NMGT 6310 (MB 710) Introduction to Engineering Management (3 sem. cr.)
NMGT 8510 (QM 710) Operations Research Models (3 sem. cr.)
NMTH 6701 (MA 520) Probability and Statistics for Scientists and Engineers (3 sem. cr.)
NMBA 6170 (NB 750) Finance and Accounting: Measurement and Flow Control for the Economic Engine (3 sem. cr.)

Program Elective Courses (9 sem. cr.)
Students select three of the following:
NMBA 6313 (MB 723) Supply Chain Management (3 sem. cr.)
NMBA 6336 (MG 726) Global Competitive Environment (3 sem. cr.)
NMBA 6150 (NB 710) Technology and Operations: Moore’s Law and Other Business Accelerators (3 sem. cr.)
NMBA 6351 (MG 770) Legal Environment of Business (3 sem. cr.)
NMBA 6160 (NB 730) Marketing: Maximizing the Organizational I/O Bus (3 sem. cr.)
NMGT 6760 (TO 760) Introduction to Project Management (3 sem. cr.)
NMGT 6761 (TO 761) Advanced Project Management (3 sem. cr.)
NMGT 8735 (TO 735) Marketing of Advanced Technologies (3 sem. cr.)
NMGT 8750 (TO 750) Total Quality Management and Improvement (3 sem. cr.)

General Elective Courses (6 sem. cr.)
Students select any two graduate-level courses.

Capstone Course (3 sem. cr.)
NMGT 6380 (MB 780) Engineering Management Capstone Project (3 sem. cr.)

M.S. in Software Engineering
Software engineering is the application of engineering design principles to the development of software. The M.S. in Software Engineering program focuses on every aspect of the software engineering process, including design, testing, implementation, and maintenance.

Degree Requirements
- 33 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (12 sem. cr.)
- General elective courses (6 sem. cr.)
Curriculum

The M.S. in Software Engineering is a 33-semester-credit program. Students complete a core set of five courses that provide a foundation in topics basic to software engineering. Then, students choose four program elective courses that build on the core content and are relevant to their specific needs and goals. Finally, students select any two graduate-level courses as general electives to complete their degree requirements.

Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.

Core Courses (15 sem. cr.)
NSEN 6001 (SE 710) Software Engineering (3 sem. cr.)
NSEN 6011  Formal Methods in Software Engineering (3 sem. cr.)
NSEN 6251 (SE 770) Software Specification (3 sem. cr.)
NSEN 6301 (SE 730) Object-Oriented Analysis and Design (3 sem. cr.)
NSEN 6411 (SE 750) Software Unit and Integration Testing (3 sem. cr.)

Program Elective Courses (12 sem. cr.)
Students select four of the following:
NSEN 6061 (SE 720) Software Measurement (3 sem. cr.)
NSEN 6111 Software Architectures (3 sem. cr.)
NSEN 6331 (SE 746) Embedded Systems Software Development (3 sem. cr.)
NSEN 6414 (SE 754) Object-Oriented Testing (3 sem. cr.)
NSEN 6421 (SE 759) Software System-Level Testing (3 sem. cr.)
NSEN 6471 (SE 760) Software Quality Management (3 sem. cr.)
NSEN 6511 (SE 785) Software Project Management (3 sem. cr.)

General Elective Courses (6 sem. cr.)
Students select any two graduate-level courses.

Thesis Option
This program does not require a thesis. However, a thesis option (maximum of six semester credits) is available and may be substituted for the general elective courses upon consultation with an advisor.

Foundation Courses
Foundation courses are available for those students who do not have an adequate preparation to begin the master’s program. Foundation courses for students entering graduate study in Software Engineering are available in topical areas.
M.S. in Systems Engineering

Systems Engineering represents an interdisciplinary approach to sound system design. It differs from other branches of engineering in that it deals with methods for analysis, synthesis, and design of complex multidisciplinary problems, as opposed to solving specific disciplinary problems. Systems engineers in the 21st century are found in many traditional engineering fields—communications, aerospace, defense, manufacturing, and information technology—as well as nontraditional fields, such as transportation logistics, medical devices, agriculture, and even criminal justice.

The M.S. in Systems Engineering program is designed to provide engineers with the necessary processes and tools, enabling them to define and validate system requirements, develop effective designs, and ensure those designs are safe and meet customer requirements. The program was developed specifically for engineers from various disciplines, so that they can become knowledgeable in this multidisciplinary approach.

Degree Requirements

- 33 semester credits
- Core courses (15 sem. cr.)
- Program elective courses (12 sem. cr.)
- General elective courses (6 sem. cr.)

Curriculum

The M.S. in Systems Engineering is a 33-semester-credit program, starting with five core courses that provide a foundation in the theory and thought processes of systems engineering. Then four program elective courses build on the core content and offer students the opportunity to pursue the areas most closely related to their professional goals. Students complete the degree by selecting any two graduate-level courses.

Note: Former NTU course numbers are shown below in parentheses for reference purposes only; students register using the Walden course numbers.

Core Courses (15 sem. cr.)
- NSYS 6120 (SY 720) Systems Engineering and Analysis (3 sem. cr.)
- NSYS 6140 (SY 540) Systems Optimization and Analysis (3 sem. cr.)
- NSYS 6152 Systems Testing and Reliability (3 sem. cr.)
- NSYS 6160 (SY 560) Systems Engineering Management (3 sem. cr.)
- NSYS 6180 (SY 580) Systems Engineering Design (3 sem. cr.)

Program Elective Courses (12 sem. cr.)

Students select four of the following:
- NMBA 6170 (NB 750) Finance and Accounting: Measurement and Flow Control for the Economic Engine (3 sem. cr.)
General Elective Courses (6 sem. cr.)

Students select any two graduate-level courses.

Certificates

NTU academic certificates are designed for working professionals who want to develop their knowledge and skills in focused areas of graduate study. Each certificate consists of at least four graduate courses for a minimum of 12 semester credits taken in the NTU College. Students can complete a graduate certificate in as little as one year. The graduate credits earned as part of an NTU academic certificate can also be applied toward a master’s degree program.

The NTU College certificate program is designed to recognize the achievements of students whose courses meet specific needs of their individual careers. This program is especially beneficial to those who already have a master’s or Ph.D. degree and do not want to pursue another advanced degree. It provides recognition of academic accomplishment while upgrading technical competence or reorienting professional careers.

Students must meet the admission requirements for the most closely associated degree program, as designated when the certificate program is defined. Students admitted to a certificate program are eligible for conditional admission and must adhere to the Conditional Admission policy as stated in the Admission section of the catalog. Upon successful completion of a certificate program, students are qualified to apply for degree admission.

Students must show progress and maintain performance in a manner identical to a degree program. Students track their progress in their Program of Study, similar to degree-seeking students. Students must receive a B or better in each course. Note: A grade of B– is not acceptable.

Example Courses

Students may customize a Program of Study comprising four NTU College courses, using a provided template along with their admission application. Upon admission, students work with academic personnel to confirm or modify the course program.

Management Certificates (12 sem. cr.)

*Technical Project Management*

NMGT 6760  Introduction to Project Management
NMBA 6140  Strategy and Negotiation: Solving the Boundary Value Problem
NMGT 6761  Advanced Project Management
NMBA 6130  Leadership and Teamwork: Accomplishing Momentum Transfer Using Power, Influence, and Collaboration

**Engineering Management**
NMGT 6310  Introduction to Engineering Management
NMBA 6150  Technology and Operations: Moore’s Law and Other Business Accelerators
NMBA 6130  Leadership and Teamwork: Accomplishing Momentum Transfer Using Power, Influence, and Collaboration
NMBA 6170  Finance and Accounting: Measurement and Flow Control for the Economic Engine

**Competitive Product Management**
NMBA 6140  Strategy and Negotiation: Solving the Boundary Value Problem
NMBA 6130  Leadership and Teamwork: Accomplishing Momentum Transfer Using Power, Influence, and Collaboration
NMGT 8735  Marketing of Advanced Technologies
NMBA 6313  Supply Chain Management

**Engineering Certificates (12 sem. cr.)**

**Software Project Management**
NSEN 6001  Software Engineering
NSEN 6251  Software Specification
NSEN 6511  Software Project Management
NSEN 6471  Software Quality Management

**Software Testing**
NSEN 6001  Software Engineering
NSEN 6251  Software Specification
NSEN 6411  Software Unit and Integration Testing
NSEN 6421  Software System-Level Testing

**Systems Engineering**
NSYS 6120  Systems Engineering and Analysis
NSYS 6140  Systems Optimization and Analysis
NSYS 6160  Systems Engineering Management
NSYS 6163  Integrated Risk Management

**Digital Signal Processing**
NEEC 6551  Digital Signal Processing I
NEEC 6557  VLSI Signal Processing
NEEC 6552  Digital Signal Processing II
NEEC 6501  Random Processes for Engineering Applications
School of Management

B.S. in Business Administration

The Bachelor of Science degree, with a major in Business Administration, is a completion program that provides students with a solid grounding in the core knowledge and competencies required in today’s diverse, global, and technologically sophisticated business environment. Business Administration majors gain a working knowledge of the principles and concepts of management theory and practice by examining the interrelationships among the major business disciplines. Through case studies and demonstrations, students evaluate practical applications of the manager’s role in planning, organizing, staffing, directing, and controlling.

This major is results-oriented and extends beyond theories and conceptual understanding to practical application. Once students have a solid foundation in the Business Administration major, they select a concentration from today’s most important fields. This flexibility ensures that students learn professionally relevant skills that can be directly applied to the working world.

Walden University offers the last 2 years (upper-division courses) of the B.S. degree. Bachelor’s program staff members work with students to help them complete the general education requirements associated with the first 2 years (lower-division courses) of the degree program; however, the university offers only the upper-division courses.

Note: Graduates from Walden’s bachelor’s degree program may apply for early admission to certain master’s programs at the university.

Concentrations

- General Program
- Finance
- Human Resource Management
- Information Systems
- Management
- Marketing

Degree Requirements

- 179–181 quarter credits (including 43–91 cr. completed at Walden)*
  - 90 lower-division credits: general education and elective courses
  - 89–91 upper-division credits
- Foundation and core courses (71 cr.)
- Concentration courses (13–15 cr.)
- Elective course (5 cr.)
Core Curriculum

Foundation Courses (6 cr.)
MGMT 1000  Success Strategies in the Online Environment (5 cr.)
MGMT 1001  Developing Student Portfolios (1 cr.)

Core Courses (65 cr.)
MGMT 3001  Management in the 21st Century (5 cr.)
MGMT 3002  Marketing (5 cr.)
MGMT 3003  Human Resource Management (5 cr.)
MGMT 3004  Financial Management (5 cr.)
MGMT 3005  Information Systems in Enterprises (5 cr.)
MGMT 3101  Ethical Leadership (5 cr.)
MGMT 3102  The Dynamics of Change (5 cr.)
MGMT 3103  Knowledge Management and Organizational Learning (5 cr.)
MGMT 3104  Accounting Principles (5 cr.)
MGMT 3105  Global Business in the 21st Century (5 cr.)
MGMT 3106  Entrepreneurship/Small Business (5 cr.)
MGMT 3107  Critical Thinking and Decision-Making (5 cr.)
MGMT 5101  Business Capstone Project—Strategic (5 cr.)

Elective Course (5 cr.)
Students select one course from a concentration other than the chosen concentration.

Specialized Curriculum

General Program (15 cr.)
The diverse curriculum of the General Program is ideal for those students who want to develop basic skills in written and oral communication, quantitative analysis, and computer usage for today’s most sought-after occupations. Most importantly, students will increase their capacity to reason critically and act ethically in the dynamic environment of the 21st century. Note: This concentration is not available to all students. Students should contact an enrollment advisor for more information.

MGMT 3501  Statistics (5 cr.)
MGMT 3502  Macroeconomics (5 cr.)
MGMT 3503  Microeconomics (5 cr.)
Finance Concentration (15 cr.)
In the Finance concentration, students learn how to effectively assess and guide the operation of an organization. The curriculum helps students gain insights into the key financial levers of an organization, so they can help management direct the organization to optimize its value, for both its employees and shareholders. Note: Students must complete MGMT 3104 Accounting Principles before entering the Finance concentration.

MGMT 4101 Corporate Finance (5 cr.)
MGMT 4102 Financial Institutions and Markets (5 cr.)
MGMT 4111 International Finance (5 cr.)

Human Resource Management Concentration (15 cr.)
The Human Resource Management concentration helps students develop insights into recruitment and selection, performance evaluation, compensation and benefits, job design, training, retention, and turnover. In addition, students explore how economic, social, psychological, legal, and cultural forces influence employment relations. Note: Courses are to be completed in the following order.

MGMT 4120 Strategic Human Resource Management (5 cr.)
MGMT 4121 Human Resource Development and Change (5 cr.)
MGMT 4122 Human Resource Management: Analysis and Problems (5 cr.)

Information Systems Concentration (13 cr.)
The Information Systems concentration teaches students how to leverage technology to meet their organization’s strategic goals by evaluating technology options; developing methods for transferring and assimilating new technology; and managing large, complex projects.

MGMT 3204 Business Process Redesign (5 cr.)
MMBA 6261 Management of Technology (4 cr.)
MMBA 6263 Case Study: Project Management (4 cr.)

Management Concentration (15 cr.)
The Management concentration focuses on aligning contemporary management practices with strategic direction. It provides students with advanced knowledge and skills in international management, human resource management, and knowledge management. Students focus on emerging trends in the international business arena, techniques for attracting and retaining effective human resources, and the integration of knowledge management with quality initiatives and organizational change.

MGMT 4101 Corporate Finance (5 cr.)
MGMT 4109 Management and Organizational Behavior (5 cr.)
MGMT 4120 Strategic Human Resource Management (5 cr.)

Marketing Concentration (15 cr.)
The Marketing concentration helps students develop insights into an organization’s marketing efforts, by learning not only the traditional disciplines of alternate marketing channels, sales management,
advertising, and research, but also emerging marketing approaches related to consumer motivation, global customer management, customer relationship management, and marketing on the Internet. Note: Courses are to be completed in the following order.

MGMT 4140  Marketing Management (5 cr.)
MGMT 4141  International Marketing (5 cr.)
MGMT 4142  Case Study: Services Marketing (5 cr.)

Policies and Procedures

The policies listed in this section pertain to students in the bachelor’s degree-completion program. Many university-wide policies in this catalog also pertain to bachelor’s students; hence, students are responsible for knowing those policies as well.

Admission Policies

**General Education**

To gain a B.S. degree from Walden University, the undergraduate student must complete a minimum of 179–181 quarter credits, including 90 credits in general education and elective courses and 89–91 credits in courses at the upper-division level (3000–4000).

Students in the B.S. program must satisfy the general education requirements of Walden University shown below. A transcript evaluation, prior learning evaluation, examination credit, and Servicemembers Opportunity Colleges or American Council on Education credit review will be completed by an enrollment advisor, and a determination will be made for both the general education and elective areas and the upper-division (major) area.

<table>
<thead>
<tr>
<th>Associate of Arts/Associate of Science/Associate of Applied Science Degree</th>
<th>90 quarter credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Or</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Arts and Sciences</strong></td>
<td>60 quarter credits</td>
</tr>
<tr>
<td>Communication (min. 9 cr., one course must be a college composition course)</td>
<td>and</td>
</tr>
<tr>
<td>Humanities (min. 9 cr.)</td>
<td>30 quarter credits</td>
</tr>
<tr>
<td>Social/Behavioral Sciences (min. 9 cr.)</td>
<td></td>
</tr>
<tr>
<td>Math/Science (min. 9 cr.)</td>
<td></td>
</tr>
<tr>
<td>Other Arts and Sciences</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>90 quarter credits</td>
</tr>
</tbody>
</table>

**Transfer of Credit**

Students are responsible for reviewing and understanding credit-transfer limits, standards, criteria, and procedures before applying for transfer of credits. A minimum of 90 quarter credits of lower-division (1000–2000) general education and elective courses must be transferred. The maximum amount allowed for transfer into the upper-division major is 45 quarter credits.

To be considered for acceptance in transfer from a U.S. institution, credits must follow these guidelines:
1. Credit was earned at a grade of C or better (2.0 on a 4.0 scale) from a U.S. institution accredited by a regional, professional/specialized, or national accrediting organization recognized by the Council for Higher Education Accreditation (CHEA), or from a non-U.S. institution, in a discipline or field related to the program/concentration for which application is made. Educational Credential Evaluators, Inc. (ECE) must evaluate coursework awarded from a non-U.S. institution as equivalent to coursework awarded by a U.S. institution.

2. Credit was arrayed within general education and elective requirements of undergraduate studies, as shown in the table above.

3. No pre-freshman or remedial credit will be accepted for transfer (below 1000 level).

4. Credit will not be awarded twice for the same learning.

5. Students who want to transfer competency-based or experiential learning credits from another regionally accredited institution must submit the following:
   - Official transcripts indicating a grade of C or better.
   - Written narrative detailing the competency-based credits.

6. Prior learning credit is designated on the official Walden transcript with a PLC designation.

7. Credit must be earned in courses where the content meets the general education and elective requirements listed above, or is equivalent to the content of corresponding Walden University courses.

**Prior Learning Credit**

Students admitted to the B.S. program may apply “prior learning” credit toward the 90-credit general education and elective requirements and up to a maximum of 45 additional credits within the major area.

1. The prior learning credit policy is strictly followed:
   - The university is a member of DANTES and will provide information to students allowing them to explore the option of credit by examination (CLEP/DANTES).
   - Retaking an examination may occur only one time per subject.
   - A 6-month waiting period must be completed before retaking an examination.
   - Credits earned by examination will be officially awarded after a student has successfully completed a minimum of 8 hours with Walden.
   - Walden will accept essay or non-essay versions of the CLEP English Composition Exam.
   - The fee for challenging a course through credit by examination is paid upon application for the examination and is non-refundable.

2. Walden University is a designated 4-year Servicemember Opportunity College (SOC) institution providing opportunities for men and women in the military service to complete educational programs by means of various modes of instruction. Transfer of such military service education programs will be in keeping with SOC guidelines.

3. The American Council on Education (ACE) has developed an approval process for offering applicable elective study in place of traditional coursework. These are the maximum amounts of transferable ACE credit allowed:
   - 21 approved credits for lower-division-level work (1000–2000).
   - 27 approved credits for upper-division-level work (3000–4000).

4. For the purpose of converting semester credits to quarter credits, the following formula may be used:
   \[ X \text{ semester credits multiplied by 1.5} = X \text{ quarter credits} \]
   (e.g., 30 semester credits multiplied by 1.5 = 45 quarter credits)
Conditional Admission

Applicants anticipating beginning the B.S. program with an incomplete application file may be approved for conditional admission upon the recommendation of the dean or the dean’s designee. Conditional admission is for one quarter only and enables students to register for courses. The missing information must be received by the end of the first term of enrollment; until the information is received, a hold prevents the student from registering for classes beyond the first term. Failure to submit the appropriate documentation by this deadline may cause the student to be administratively withdrawn from the university. Walden cannot process student loans or disburse funds until it is in receipt of all official transcript(s) or international evaluations.

Occasionally, an applicant to the bachelor’s degree program will not meet the admission criteria. With the recommendation of the dean or the dean’s designee, such an applicant may be granted conditional admission for the following:

Not meeting the appropriate prerequisites for a given major at the bachelor’s level. Students may not have completed the prerequisite courses for that major. For example, a student with a previous major in English, now wanting to obtain a major in Business Administration will not have the prerequisite business courses. Students admitted conditionally, with the recommendation of the dean (or designee) may take up to three courses (15 cr.) of prerequisites concurrently with preapproved courses in the core, concentration, or elective areas. Those students seeking concurrent enrollment and conditional/probationary admission must consult with an academic advisor prior to enrollment and have an application for concurrent enrollment approved in writing by the dean (or designee).

Not having the required distribution of credits within the general education area. Students admitted conditionally with the recommendation of the dean (or designee) may take up to four courses (20 cr.) of lower-level credits concurrently with their upper-division coursework at Walden. Those students seeking concurrent enrollment and conditional/probationary admission must consult with an enrollment advisor prior to enrollment and have an application for concurrent enrollment approved in writing by the dean (or designee).

Note: These requirements may be modified based on articulation agreements formally negotiated with a regionally accredited community college.

Deferred Admission

Students may defer admission for up to two quarters with the written request for a deferred admission date.

Minimum Credits Earned at Walden University

Students must fulfill a minimum requirement of 45 upper-division credits through Walden University to receive a Walden B.S. degree. (Specific program requirements may vary and may be slightly more than 45 credits depending upon the concentration.) If students have received transfer credit for a course with duplicated learning in a required course, the academic advisor will recommend another course so students may meet the total number of required credits.
Academic Progress Standards

The academic progress standards for the bachelor’s program appear below. Students are advised that the satisfactory progress guidelines for continued receipt of financial aid are separate and discrete from these academic progress standards.

- Students must complete a minimum of three courses per year of enrollment.
- Students must maintain an overall undergraduate GPA of 2.0 in classes taken at the university.

Undergraduate Course Grading Scale

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Point Value</th>
<th>Definition Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Student met all participation requirements; completed all assignments, group projects, and papers; met the evaluation criteria for the course as specified in the syllabus; and submitted superior quality work.</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>Above average. Student met all participation requirements; completed all assignments, group projects, and papers; met the evaluation criteria for the course as specified in the syllabus; and submitted satisfactory quality work.</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>Average. Student met all participation requirements; completed all assignments, group projects, and papers; met the evaluation criteria for the course as specified in the syllabus; and submitted satisfactory quality work.</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>Marginal.</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>Failure. Student did not meet the criteria for a passing grade.</td>
</tr>
<tr>
<td>S</td>
<td>N/A</td>
<td>Satisfactory. Student passed the course satisfactorily.</td>
</tr>
<tr>
<td>U</td>
<td>N/A</td>
<td>Unsatisfactory. Student did not meet the criteria for an S grade.</td>
</tr>
<tr>
<td>I</td>
<td>N/A</td>
<td>Incomplete. Student did not meet all participation requirements or complete all assignments at the 55% completion level. The student requested an Incomplete from the course faculty before the final withdrawal date of the quarter.</td>
</tr>
<tr>
<td>NC</td>
<td>N/A</td>
<td>No Credit. Administrative assignment only.</td>
</tr>
<tr>
<td>W</td>
<td>N/A</td>
<td>Withdrawal. Administrative assignment only.</td>
</tr>
</tbody>
</table>

Grade Point Average

Students in undergraduate programs must maintain a GPA of 2.0 or above to graduate. The registrar calculates grade point averages according to the point values stated in the grading scale. Grades of NC (No Credit) and W (Withdraw) are non-punitive and do not figure into the GPA; however, the designations of NC and W do appear on the transcript. A grade of S (Satisfactory) appears on the transcript, but is not calculated in the GPA. A grade of I (Incomplete) is not calculated in the GPA.

Course Participation Policy

Participation requirements in all bachelor’s-level courses are determined by the course faculty, who may ask for postings to the course’s online discussion board 2–5 days per week for attendance purposes. Because of the short length and intensive nature of the 6-week course, 4–5 days will be required in most courses with multiple responses in a single day being necessary for adequate participation in a significant proportion of the assignments.
**Enrollment Standards**

The university requires students to adhere to the appropriate enrollment criteria and standards as specified below.

**Minimum Enrollment Requirement**

Bachelor’s students must complete a minimum of 45 credits and four quarters with Walden to receive the Walden University B.S. degree. (Students must transfer a minimum of 90 undergraduate credits for admission into the program.)

**Maximum Enrollment Requirement**

The maximum enrollment limit for bachelor’s students is 4 years. The Program of Study will serve as a guide for students, detailing those courses accepted in transfer, including prior learning assessment and credit by examination. Upper-division courses will also be detailed within the Program of Study, guiding students in attainment of their B.S. degree program requirements. The students’ specific concentration will determine the exact number of required credits.

**Undergraduate Online Writing Lab**

At Walden University, the writing experience provides the major learning method in the undergraduate program. The critical-thinking skills and facility of expression inherent in the writing process are tools that directly affect each student’s success, not only at Walden, but also in meeting expectations of current and future employers. Papers and other written submissions in the Bachelor of Science program must follow the *Franklin Covey Style Guide with CD*.

The School of Management is committed to providing a successful writing experience through the Online Writing Lab, which addresses the needs of the undergraduate student. In addition to online writing resources, the site also is the home of the Writing Tutorial Support Services program tailored to address specific writing needs. Students who have simple questions or require occasional writing assistance may use the Drop-In Writing Support Service. Students who need more ongoing assistance may use the Contract Writing Support Service. Students may seek writing support services on their own initiative, or a faculty member may refer them to the Walden Online Writing Lab.

**Master of Business Administration (M.B.A.)**

The School of Management’s M.B.A. program focuses on four key areas: reflective business leadership and management practice, business processes, specialized practice, and capstone courses. The program provides students with a solid grounding in leading-edge management, economics, and marketing strategies and practices, with specializations in areas critical to success in today’s competitive business environment.

The curriculum of Walden’s M.B.A. program helps students gain the added credentials and valuable learning they need to advance their careers. A variety of specializations and electives allows students to tailor the program, so they can immediately apply their learning to their organization’s needs. The program’s courses are delivered in a prescribed sequence.
Degree Requirements

- 40–56 quarter credits*
- Foundation course (4 cr.)
- Core courses (32 cr.)
- Specialized courses (12 cr.)
- Capstone courses (8 cr.)
- Minimum 3.0 GPA
- Continuous registration and course participation

*Students who have earned a Chartered Property Casualty Underwriter (CPCU), Professional in Human Resources (PHR), Senior Professional in Human Resources (SPHR), or Global Professional in Human Resources (GPHR) designation may be eligible to take an accelerated M.B.A. program.

Note: Up to four courses may be transferred based on coursework completed at the master’s level. MMBA 6300 Success Strategies in the Online Environment may not be waived or transferred.

Specializations

- General Management
- Accounting for Managers
- E-Business
- Finance
- Global Business
- Health Care Management
- Human Resource Management
- Knowledge/Learning Management
- Management of Technology
- Marketing
- Nonprofit Management and Leadership
- Risk Management/Insurance

Core Curriculum

Foundation Course (4 cr.)

MMBA 6300  Success Strategies in the Online Environment (4 cr.)

Core Courses (32 cr.)

MMBA 6305  Reflective Practice in Management (4 cr.)
MMBA 6310  Global Management (4 cr.)
MMBA 6320  Human Resource Management (4 cr.)
MMBA 6330  Management Information Systems (4 cr.)
MMBA 6340  Business Statistics (4 cr.)
MMBA 6350  Fundamentals of Marketing (4 cr.)
MMBA 6360  Introduction to Financial and Managerial Accounting (4 cr.)
MMBA 6370  Financial Management (4 cr.)

Capstone Courses (8 cr.)
MMBA 6380  Legal and Ethical Issues for Managers (4 cr.)
MMBA 6390  Strategic Management and Planning (4 cr.)

Specialized Curriculum
The following specialized courses must be taken in the order they are listed below.

General Management Specialization
The General Management specialization offers the broad perspective that is critical to leading an entire organization. Rather than focusing in depth on a particular specialization, students gain insights into organizational behavior and key areas such as marketing and human resource management.

MMBA 6405  Organizational Behavior (4 cr.)
MMBA 6421  Advanced Marketing Management (4 cr.)
MMBA 6474  Strategic Human Resource Management (4 cr.)

Accounting for Managers Specialization
Designed for business managers seeking a greater understanding of accounting tools and concepts, the Accounting for Managers specialization prepares students to work more effectively with both internal accounting departments and outside agencies. Students investigate the budget process and in-depth financial reporting and analysis, as well as the regulatory issues brought forth by Sarbanes-Oxley.

MMBA 6431  Value-Based Budgeting and Prospective Financial Analysis (4 cr.)
MMBA 6432  Sarbanes-Oxley, Auditing, and the Regulatory Environment (4 cr.)
MMBA 6433  Financial Reporting Analysis (4 cr.)

E-Business Specialization
The E-Business specialization provides students with the expertise to effectively deploy e-solutions, including business-to-business, supply chain management, and customer relationship management.

MMBA 6441  E-Business Technology (4 cr.)
MMBA 6442  E-Business Marketing (4 cr.)
MMBA 6443  Case Study: E-Business Strategy (4 cr.)

Finance Specialization
The Finance specialization teaches students theories of corporate finance and helps them acquire tools to make more informed, ethical, and profitable business decisions. Students gain a broad knowledge of corporate finance, financial markets, institutions, banking, and financial risk management.

MMBA 6401  Corporate Finance (4 cr.)
MMBA 6402  Financial Institutions and Markets (4 cr.)
MMBA 6403  Case Study: Financial Modeling (4 cr.)

Global Business Specialization

The specialization in Global Business provides students insight into the cultural, economic, and political factors of international commerce that impact the success of organizations and industries. Students analyze international business operations and practices, global logistics and supply chain management, international trade and market entry, and international finance and economic policies.

MMBA 6451  International Trade (4 cr.)
MMBA 6452  International Finance (4 cr.)
MMBA 6453  Case Study: International Business Strategy (4 cr.)

Health Care Management Specialization

The specialization in Health Care Management provides students a broad overview of the American health care system and emerging issues that will shape its future. Students examine how to contain medical costs while maintaining quality patient care and other challenges in this increasingly complex environment.

MMBA 6491  The American Health Care System: A Systems Perspective (4 cr.)
MMBA 6492  Health Care Quality Management (4 cr.)
MMBA 6493  Health Care in the 21st Century (4 cr.)

Human Resource Management Specialization

The Human Resource Management specialization provides students with strategies to align the goals of an organization with its talent base. Students learn the fundamentals of strategic human resource management, including staffing, training, and improving and rewarding performance. Students also gain insight into conflict resolution and employee-labor relations to better address workplace issues. Note: Students who have earned a Chartered Property Casualty Underwriter (CPCU), Professional in Human Resources (PHR), Senior Professional in Human Resources (SPHR), or Global Professional in Human Resources (GPHR) designation may be eligible to take an accelerated M.B.A. program.

MMBA 6474  Strategic Human Resource Management (4 cr.)
MMBA 6472  Human Resource Development and Change (4 cr.)
MMBA 6473  Case Study: Applications in Human Resource Management and Professional Practice (4 cr.)

Knowledge/Learning Management Specialization

The Knowledge/Learning Management specialization helps students learn to leverage an organization’s internal knowledge more effectively. Students learn how to transfer knowledge from one individual or department throughout the entire organization to encourage creativity and innovation. They also discover how to design a custom knowledge management strategy that is functional, adaptive, sustainable, and timely.

MMBA 6481  Creating and Using Knowledge for Business Performance (4 cr.)
Management of Technology Specialization

The Management of Technology specialization teaches students how to integrate technology more fully into overall business strategies. Students learn how to assess and evaluate technical systems and develop methods to manage large, complex technical projects.

MMBA 6461  Management of Technology (4 cr.)
MMBA 6462  Organizational Performance Improvement (4 cr.)
MMBA 6463  Case Study: Project Management (4 cr.)

Marketing Specialization

The specialization in Marketing helps students learn how to effectively connect the right product or service with the right customers—through a comprehensive range of proven skills, including market research, branding, and relationship marketing. Students expand their global perspective through coursework on assessing and developing international marketplaces.

MMBA 6421  Advanced Marketing Management (4 cr.)
MMBA 6422  International Marketing (4 cr.)
MMBA 6423  Case Study: Services Marketing (4 cr.)

Nonprofit Management and Leadership Specialization

The Nonprofit Management and Leadership specialization teaches students how to effectively lead a nonprofit organization by leveraging best practices from the public and private sectors. Students review such key issues as mission development, budgeting, strategic planning, marketing, fund raising, social entrepreneurship, and board governance. The program provides students with a deeper understanding of the role of nonprofit organizations in fostering social change. Note: These 12-week courses are to be taken simultaneously.

MMPA 6340  Leadership for the Nonprofit Sector (4 cr.)
MMPA 6341  Fund Raising and Marketing in Nonprofit Organizations (4 cr.)
MMPA 6342  Nonprofit Management (4 cr.)

Risk Management/Insurance Specialization

The Risk Management/Insurance specialization prepares students with expertise in assessing an organization’s exposure to product, professional, and environmental liabilities. Students learn how to choose alternative techniques to reduce exposure and risks and implement a risk-assessment tool to evaluate future risks.

MMBA 6401  Corporate Finance (4 cr.)
MMBA 6402  Financial Institutions and Markets (4 cr.)
MMBA 6413  Case Study: Risk Management and Insurance (4 cr.)
Course Sequence

First Quarter
MMBA 6300  Success Strategies in the Online Environment
MMBA 6305  Reflective Practice in Management

Second Quarter
MMBA 6310  Global Management
MMBA 6320  Human Resource Management

Third Quarter
MMBA 6330  Management Information Systems
MMBA 6340  Business Statistics

Fourth Quarter
MMBA 6350  Fundamentals of Marketing
MMBA 6360  Introduction to Financial and Managerial Accounting

Fifth Quarter
MMBA 6370  Financial Management
Specialized Course

Sixth Quarter
Specialized Course
Specialized Course

Seventh Quarter (Capstone)
MMBA 6380  Legal and Ethical Issues for Managers
MMBA 6390  Strategic Management and Planning

Dual-Degree Program
Students can obtain a dual degree by combining the M.B.A. program with the Walden’s Master of Public Administration (M.P.A.) program.

Students who have applied and are admitted to a dual-degree program are able to complete the entire program with fewer credits than would be needed if the two degree programs were completed separately.

Note: Students start and complete one program before starting the second program.
Ph.D. in Applied Management and Decision Sciences

The Ph.D. in Applied Management and Decision Sciences (A.M.D.S.) program prepares students to anticipate the impact of global interdependencies, technology, and diversity—on themselves and on the organizations they lead. Through applied research, the curriculum offers a deeper understanding of the primary trends impacting the 21st-century enterprise, including the important management disciplines of finance, leadership and organizational change, knowledge and learning management, and decision-making.

Specializations

- General Program
- Accounting
- Engineering Management
- Finance
- Information Systems Management
- Knowledge Management
- Leadership and Organizational Change
- Learning Management
- Operations Research
- Self-Designed

Degree Requirements

KAM-Based Specializations

*General Program, Accounting, Engineering Management, Finance, Leadership and Organizational Change, Operations Research, and Self-Designed Specializations*

- 134 quarter credits minimum
- Foundation course: SBSF 8005 (6 cr.)
- Professional Development Plan and Program of Study
- 6 Knowledge Area Modules (84 cr.)*
- Satisfactory progress in all SBSF 7100 registrations
- Foundation Research Sequence (14 cr.)
- Proposal, dissertation, and oral presentation (30 cr.)
- 20 days of academic residency (two 4-day and two 6-day residencies)

KAM-/Course-Based Specializations

*Information Systems Management Specialization*

- 130–132 quarter credits
• Foundation course: AMDS 8000 (4 cr.)
• Professional Development Plan and Program of Study
• Core coursework (40–42 cr.)
• Any 3 Knowledge Area Modules (42 cr.)*
• Foundation Research Sequence (14 cr.)
• Proposal, dissertation, and oral presentation (30 cr.)
• 20 days of academic residency (two 4-day and two 6-day residencies)

Knowledge Management and Learning Management Specializations

• 134 quarter credits
• Foundation course: SBSF 8005 (6 cr.)
• Professional Development Plan and Program of Study
• Core and specialization coursework (42 cr.)
• Any 3 Knowledge Area Modules (42 cr.)*
• Foundation Research Sequence (14 cr.)
• Proposal, dissertation, and oral presentation (30 cr.)
• 20 days of academic residency (two 4-day and two 6-day residencies)

*Option for KAM VII
Based on background and specific dissertation objectives, students often have very different research needs. Therefore, for all doctoral programs within the School of Management, the KAM VII requirement has been designed to provide students with three options to meet these different needs. With the approval of the student’s faculty mentor and the appropriate program administrator, the student may select one of the following options:

• Complete three appropriate graduate-level courses.
• Complete an independent paper on a critical topic and two complementary graduate-level courses.
• Complete a traditional KAM, focused on the research design selected by the student.

Curriculum
The A.M.D.S. curriculum offers an interdisciplinary approach to the study of management. Students may elect the General Program, choose a specialization that fits a personal/career objective, or design an individualized specialization.

General Program

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Core KAMs I–III (42 cr.)
Core KAM I: Principles of Societal Development (14 cr.)
Perspectives in social and behavioral sciences as they influence human values and lifestyles, communication, social networks, and forecasting alternative futures are addressed. Students begin to integrate theoretical constructs into practical applications for their own interest areas.
Core KAM II: Principles of Human Development (14 cr.)
This KAM covers basic theories and current research on biological, psychosocial, cognitive, and affective human development, including normal developmental patterns and crises that may occur. Students explore developmental questions in the context of both chronological time and underlying physical, social, and psychological experiences.

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
This is an introduction to systems theories from various disciplines. The primary models of structured system theories are presented as a background and theoretical framework for the other knowledge areas. Also considered are theories that impact micro and macro levels of social, political, and economic systems.

Foundation Research Sequence (14 cr.)
The first two components are online seminars, requiring students to participate in weekly, Web-based seminar discussions. The third component provides an option: students may select a Web-based seminar combined with a face-to-face meeting concurrent with a Walden residency, or they may complete a Web-based seminar without a face-to-face session. Faculty members guide discussions, require specific readings, and evaluate assignments.

Specialized KAMs V–VII (42 cr.)
Specialized KAM V: Organizational Dynamics and Development (14 cr.)

Specialized KAMs V: Organizational Dynamics and Development (14 cr.)
**Application:** AMDS 8530  Professional Practice Application of a Theory of Organizational Dynamics and Development (4 cr.)

**Specialized KAM VI: Decision Sciences (14 cr.)**
*Breadth:* AMDS 8610  Decision Theory and Analysis (5 cr.)
*Depth:* AMDS 8620  Current Research in Decision Sciences (5 cr.)
*Application:* AMDS 8630  Models for Decision-Making (4 cr.)

**Specialized KAM VII: Research (14 cr.)**
*Breadth:* AMDS 8710  Research Methods (5 cr.)
*Depth:* AMDS 8720  Selected Research Methods (5 cr.)
*Application:* AMDS 8730  Research Design (4 cr.)

**Dissertation (30 cr.)**
AMDS 9000  Dissertation (30 cr.)

**Accounting Specialization**

The Accounting specialization is designed to help accountants and auditors broaden their knowledge and business skills in various areas, including auditing, budget analysis, financial and international accounting, management accounting, accounting information system consulting, fraud examination, forensic accounting, and tax consulting and preparation services. *Note: Students who do not have an undergraduate or master’s degree in accounting must complete MGMT 3104 Accounting Principles or equivalent. In addition, students must complete a college-level course in differential and integral calculus.*

**SBSF 8005 Foundations for Doctoral Study (6 cr.)**
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

**Core KAMs I–III as described under the General Program (42 cr.)**

**Foundation Research Sequence as described under the General Program (14 cr.)**

**Specialized KAMs V–VII (42 cr.)**

**Specialized KAM V: Financial Accounting Theory (14 cr.)**
*Breadth:* AMDS 8515  Theory of Financial Accounting (5 cr.)
*Depth:* AMDS 8525  Current Research in Financial Accounting (5 cr.)
*Application:* AMDS 8535  Professional Practice: Application of Financial Accounting (4 cr.)

**Specialized KAM VI: Auditing and International Accounting Theory (14 cr.)**
*Breadth:* AMDS 8615  Theory of Auditing and International Accounting (5 cr.)
*Depth:* AMDS 8625  Current Research in Auditing and International Accounting (5 cr.)
*Application:* AMDS 8635  Professional Practice: Application of Auditing and International Accounting (4 cr.)
Specialized KAM VII: Research (14 cr.)
Breadth: AMDS 8710  Research Methods (5 cr.)
Depth: AMDS 8720  Selected Research Methods (5 cr.)
Application: AMDS 8730  Research Design (4 cr.)

Dissertation (30 cr.)
AMDS 9000  Dissertation (30 cr.)

Engineering Management Specialization
The Engineering Management specialization allows either practicing engineers who plan a move into management or engineers who are already managers to learn the social and behavioral aspects of management. Students gain foundational knowledge in the areas of societal development, human development, organizational and social systems, and principles of societal and behavioral science research to add to their understanding of engineering principles.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Core KAMs I–III as described under the General Program (42 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

Specialized KAMs V–VII (42 cr.)
Specialized KAM V: Engineering Management Quality (14 cr.)
Breadth: AMDS 8514  Global Total Quality Management (5 cr.)
Depth: AMDS 8524  Methods and Tools for Managing Quality Improvement (5 cr.)
Application: AMDS 8534  Reliability and Cost of Quality (4 cr.)

Specialized KAM VI: Engineering Management of Globally Competitive Goods and Services (14 cr.)
Breadth: AMDS 8614  Management for World-Class Products (5 cr.)
Depth: AMDS 8624  Collaborative/Concurrent Engineering Management (5 cr.)
Application: AMDS 8634  Product Life-Cycle Cost and Time to Market (4 cr.)

Specialized KAM VII: Research (14 cr.)
Breadth: AMDS 8710  Research Methods (5 cr.)
Depth: AMDS 8720  Selected Research Methods (5 cr.)
Application: AMDS 8730  Research Design (4 cr.)

Dissertation (30 cr.)
AMDS 9000  Dissertation (30 cr.)
Finance Specialization

The Finance specialization integrates foundational study in management and decision sciences with specialized topics in financial theory, systems, and practices. During the program, students examine the development of financial market cultures, financial decision-making techniques, and the impact of financial models on social, political, and economic systems. Students research and apply theories related to corporate finance, investment, and international finance. The curriculum also includes case study analysis, principles of social and behavioral research, and an emphasis on applied change in financial domains.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Core KAMs I–III as described under the General Program (42 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

Specialized KAMs V–VII (42 cr.)

Specialized KAM V: Corporate Financial Theory (14 cr.)
  Breadth: AMDS 8513  Theory of Corporate Finance (5 cr.)
  Depth: AMDS 8523  Current Research in Corporate Finance (5 cr.)
  Application: AMDS 8533  Professional Practice: Application of Corporate Finance (4 cr.)

Specialized KAM VI: Investment and International Finance (14 cr.)
  Breadth: AMDS 8613 Theory of Investments and International Finance (5 cr.)
  Depth: AMDS 8623  Current Research in Investments and International Finance (5 cr.)
  Application: AMDS 8633 Professional Practice: Application of Investments and International Finance (4 cr.)

Specialized KAM VII: Research (14 cr.)
  Breadth: AMDS 8710  Research Methods(5 cr.)
  Depth: AMDS 8720  Selected Research Methods (5 cr.)
  Application: AMDS 8730  Research Design (4 cr.)

Dissertation (30 cr.)
AMDS 9000  Dissertation (30 cr.)

Information Systems Management Specialization

The Information Systems Management specialization provides an integrative approach to all aspects of organizations—people, technology, and management—in today’s information-rich environment. This specialization focuses on executive leadership skills similar to those of a CEO, CTO, or COO in depth, breadth, and application. The curriculum design is intended to promote the scholarship of discovery, integration, application, and teaching in order to derive maximum value and innovation from systems investments and strategic direction.
Foundation Course (4 cr.)
AMDS 8000 Success Strategies in the Online Learning Environment (4 cr.)

Core Courses (40–42 cr.)
AMDS 8110 Management Information Systems (4 cr.)

Technology Management
AMDS 8125 Organizational Performance Improvement (4 cr.)
AMDS 8135 Project Management (4 cr.)
AMDS 8305 Readings in Information Systems (4 cr.)

Information Technology
AMDS 8215 Systems Analysis, Design, and Implementation (4 cr.)
AMDS 8225 Database Concepts (4 cr.)
AMDS 8235 Communications and Networking (4 cr.)

Managing Emerging Technologies
AMDS 8316 Security Management and Risk Assessment (4 cr.)
AMDS 8325 E-Commerce Strategies (4 cr.)

Advanced Individual Studies
AMDS 8300 Advanced Individual Studies: New Faculty Training (4 cr.)
or
AMDS 8301 Advanced Individual Studies: Publishing Option (4 cr.)

Optional Course
SBSF 8002 Writing a Quality KAM Demonstration (2 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

3 Appropriate KAMs (42 cr.)

Dissertation (30 cr.)
AMDS 9000 Dissertation (30 cr.)

Knowledge/Learning Management Specializations

The Knowledge Management and Learning Management specializations prepare students to develop innovative solutions to their organizations’ most critical challenges through the comprehensive creation, sharing, and use of knowledge, and the effective education of adult learners. The specializations focus on the effective use of knowledge, organizational change (e.g., total quality, Six Sigma, re-engineering, Malcolm Baldrige National Quality Award), and organizational learning, including the deployment of corporate universities.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.
Core Courses (18 cr.)
AMDS 8335 Principles of Knowledge Management (4 cr.)
AMDS 8800 Epistemology and the Practice of Knowledge and Learning Management (4 cr.)
AMDS 8801 Principles of Learning Management (4 cr.)
AMDS 8899 Capstone Seminar (6 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

Specialization Courses (24 cr.)
Students complete all four courses under either Knowledge Management or Learning Management:

Knowledge Management
AMDS 8810 Integrating Knowledge Management With Strategic Initiatives (4 cr.)
AMDS 8811 Advanced Knowledge Management Concepts (4 cr.)
AMDS 8812 Expert Systems (4 cr.)
AMDS 8813 E-Systems (4 cr.)

Learning Management
AMDS 8830 Adult Learning (4 cr.)
AMDS 8831 Lifelong Learning (4 cr.)
AMDS 8832 Education Design for Adult Learners (4 cr.)
AMDS 8833 Integration of Knowledge and Learning Management With Strategic Educational Initiatives (4 cr.)

Courses From the Other Specialization
Students also complete two courses from the other specialization. For example, students who choose the Knowledge Management specialization will also take two of the courses listed under Learning Management.

3 Appropriate KAMs (42 cr.)

Dissertation (30 cr.)
AMDS 9000 Dissertation (30 cr.)

Leadership and Organizational Change Specialization
The Leadership and Organizational Change specialization prepares practitioners to work with emerging leadership paradigms and to facilitate creative and constructive organizational change. The specialization assumes practitioners are concerned with designing interventions that promote effective leadership development, interpersonal relationships, and group and organizational dynamics, which lead to higher performance levels. The specialization incorporates global perspectives on leadership and organizational change and requires students to gain a solid understanding of other cultures.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.
Core KAMs I–III as described under the General Program (42 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

Specialized KAMs V–VII (42 cr.)

Specialized KAM V: Leadership Development (14 cr.)
Breadth: AMDS 8512 Classical and Emerging Paradigms of Leadership (5 cr.)
Depth: AMDS 8522 Current Research on Leadership Development (5 cr.)
Application: AMDS 8532 Professional Practice Application of a Theory of Leadership Development (4 cr.)

Specialized KAM VI: Organizational Change Models (14 cr.)
Breadth: AMDS 8612 Model of Organizational Change and Development (5 cr.)
Depth: AMDS 8622 Current Research on a Model of Organizational Change (5 cr.)
Application: AMDS 8632 Professional Practice Application of an Organizational Change Model (4 cr.)

Specialized KAM VII: Research (14 cr.)
Breadth: AMDS 8710 Research Methods (5 cr.)
Depth: AMDS 8720 Selected Research Methods (5 cr.)
Application: AMDS 8730 Research Design (4 cr.)

Dissertation (30 cr.)
AMDS 9000 Dissertation (30 cr.)

Operations Research Specialization
The Operations Research specialization (sometimes referred to as Management Science or by the acronym OR/MS) prepares practitioners to work within paradigms familiar to social scientists, as will be increasingly necessary in the next century. The Operations Research specialization assumes the need for a solid understanding of other cultures as graduates of the program enter a global business community. This specialization is one of research implementation, not implementation research.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
New students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Core KAMs I–III (42 cr.)

Core KAM I: Principles of Societal Development (14 cr.)
Breadth: SBSF 8111 Theories of Societal and Cultural Development (5 cr.)
Depth: AMDS 8121 Current Research in Societal and Cultural Development (Operations Research) (5 cr.)
Application: AMDS 8131 Professional Practice and Societal and Cultural Development (Operations Research) (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)
Breadth: SBSF 8210 Theories of Human Development (5 cr.)
Depth: AMDS 8221 Current Research in Human Development—Decision Analysis (Operations Research) (5 cr.)
Application: AMDS 8231 Professional Practice and Human Development—Applied Decision Analysis (Operations Research) (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)
Depth: AMDS 8321 Current Research in Organizational and Social Systems—Systems Engineering (Operations Research) (5 cr.)
Application: AMDS 8331 Professional Practice and Organizational and Social Systems—Applications of Systems Engineering and Analysis (Operations Research) (4 cr.)

Foundation Research Sequence as described under the General Program (14 cr.)

Specialized KAMs V–VII (42 cr.)

Specialized KAM V: Deterministic Operations Research Techniques (14 cr.)
Breadth: AMDS 8511 Theory of Deterministic Methods (5 cr.)
Depth: AMDS 8521 Current Research in Deterministic Methods (5 cr.)
Application: AMDS 8531 Professional Practice: Application of Deterministic Methods (4 cr.)

Specialized KAM VI: Stochastic Operations Research Techniques (14 cr.)
Breadth: AMDS 8611 Theory of Stochastic Methods (5 cr.)
Depth: AMDS 8621 Current Research in Stochastic Methods (5 cr.)
Application: AMDS 8631 Professional Practice: Application of Stochastic Methods (4 cr.)

Specialized KAM VII: Research (14 cr.)
Breadth: AMDS 8710 Research Methods (5 cr.)
Depth: AMDS 8720 Selected Research Methods (5 cr.)
Application: AMDS 8730 Research Design (4 cr.)

Dissertation (30 cr.)
AMDS 9000 Dissertation (30 cr.)

Self-Designed Specialization

Students in the Ph.D. in Applied Management and Decision Sciences program have the option to self-design a specialization. A self-designed specialization must fit within the existing KAM curriculum structure of the General Program. The specialization must be developed in consultation with program faculty and approved by the dean or the dean’s designee.

Declaring a Self-Designed Specialization

Students wanting to pursue a self-designed program must declare the specialization by the end of their second quarter of enrollment in conjunction with the Professional Development Plan and Program of Study. The Professional Development Plan and Program of Study must clearly reflect how the student intends to integrate the self-designed specialization into the depth and application sections of all the KAMs, as well as the dissertation. The breadth component of the specialized KAMs must also support the specialization; however, the breadth component of the core KAMs is not used to support specializations. Students in the Self-Designed specialization should complete the Program of Study form using the General Program course numbers for the breadth, depth, and application components of each KAM. The
depth and application components should include a subtitle that reflects the focus of the student’s own unique specialization. In the specialized KAMs, the titles of the breadth component must also reflect the unique specialization.

**Completing a Self-Designed Specialization**

To complete a self-designed specialization, students follow the course of study outlined in the Professional Development Plan, demonstrating in all academic work doctoral-level competency in the specialization area. Academic work that does not adequately support the declared specialization will be returned to the student for revision.
School of Public Policy and Administration

Master of Public Administration (M.P.A.)

As governmental and nongovernmental institutions increasingly overlap and evolve, the demand for well-educated management professionals to excel in public service continues to grow. The Master of Public Administration (M.P.A.) program prepares public/nonprofit professionals to excel in this increasingly complex, politicized, intergovernmental environment. Students benefit from the time, resources, and guidance needed to develop well-grounded new public policies and management practices. The program offers students an opportunity to directly apply academic theories and skills to activities in their own communities, making the learning experience personally meaningful while contributing to the betterment of society.

Degree Requirements

- 64 quarter credits (except General Program, 52 cr.)
- Core courses (52 cr.)
- Specialization courses (12 cr.)
- Portfolio

Specializations

- General Program
- Criminal Justice
- Health Services
- Homeland Security Policy and Coordination
- International Nongovernmental Organizations (NGOs)
- Knowledge Management
- Nonprofit Management and Leadership
- Public Management and Leadership
- Public Policy
- Public Safety Management

Core Curriculum

Students can complete the General Program by taking the Core Curriculum courses. Courses are 12 weeks in length.
Fundamental Core Courses (24 cr.)
Courses are delivered in a prescribed sequence during the first four quarters.

Quarter 1
MMPA 6000  Foundations for Graduate Study (6 cr.)

Quarter 2
MMPA 6210  Managing at the Boundaries: Creative Thinking for Social Change (6 cr.)

Quarter 3
MMPA 6220  Principles of Public Administration: Applied Critical-Thinking Skills (6 cr.)

Quarter 4
MMPA 6230  Professional Leadership and Ethics (4 cr.)
MMPA 6240  Cultural Competency: Communication Skills for a Global Society (2 cr.)

Additional Core Courses (28 cr.)
MMPA 6250  Nonprofit and Government Budgeting and Finance (4 cr.)
MMPA 6265  Organizational Theory and Behavior (4 cr.)
MMPA 6275  Human Resource Management (4 cr.)
MMPA 6285  Policy Analysis (4 cr.)
MMPA 6295  Applied Research (4 cr.)
MMPA 6300  Strategic Management of Information (4 cr.)
MMPA 6305  Capstone Seminar (4 cr.)

Specialized Curriculum
Students who wish to gain additional knowledge in a specialized area can choose one of the following specializations.

Criminal Justice Specialization (12 cr.) – Available June 2007
This specialization is designed for criminal justice professionals, including supervisors and managers in policing, courts, corrections, security, and associated support agencies, who aspire to move into upper-level management and administrative assignments. The coursework includes an in-depth review and discussion of contemporary decision-making models and issues confronting the American criminal justice system.

MMPA 6350 Historical and Contemporary Issues in Criminal Justice (4 cr.)
MMPA 6351 Policy Analysis in the Criminal Justice System (4 cr.)
MMPA 6352 Leadership: Putting Theory Into Practice in Criminal Justice Administration (4 cr.)

Health Services Specialization (12 cr.)
Americans have seen radical changes in the health care industry over the past several years. They’ve watched it go from an independent structure to a collection of major business enterprises, which in turn
have changed the way health care is delivered. As the health care environment changes, managers must quickly adapt to succeed. The Health Services specialization helps students gain valuable knowledge about health delivery systems, health policy, health administration, and health finance centers, so they can manage effectively and successfully in this unique environment.

PUBH 6130  Health Care Organization, Policy, and Administration (4 cr.)
PUBH 6250  U.S. and International Health Care Systems (4 cr.)
PUBH 6920  Health Services Financial Management (4 cr.)

Homeland Security Policy and Coordination Specialization (12 cr.)

Today’s complex public safety environment demands smart policy on emergency response strategies. This specialization prepares homeland security professionals to implement protective measures without compromising individual rights and freedoms. With this knowledge, students are equipped to effectively develop policy to protect individuals’ safety and freedom.

MMPA 6320  Public Policy Implications of Terrorism Legislation and Policies (4 cr.)
MMPA 6321  Terrorism: A Systemic Approach for Emergency Preparedness (4 cr.)
MMPA 6322  Critical Incident Planning and Leadership (4 cr.)

International Nongovernmental Organizations (NGOs) Specialization (12 cr.)

In an era of increasing globalization, it is important for leaders of nonprofit organizations and governmental departments at the local, state, and national levels to know how to operate in an international environment. This specialization explores how countries organize, regulate, and foster nongovernmental activities; how international intergovernmental organizations operate; and how representatives of these organizations can learn from, partner with, and work within organizations worldwide. By focusing on the effects of globalization and the cultures and sociopolitical environments of diverse nations and organizations, students in this specialization learn how to work effectively with nongovernmental organizations, voluntary organizations, and intergovernmental organizations around the world.

MMPA 6330  Holding Up the Mirror: Understanding Different Cultures and Increasing Global Consciousness (4 cr.)
MMPA 6331  Crossing Borders: U.S. and International NGO Organizational Cultures and Environments (4 cr.)
MMPA 6332  Placing NGOs in the Global Context (4 cr.)

Knowledge Management Specialization (12 cr.)

The Knowledge Management specialization prepares students to develop innovative solutions to their organizations’ most critical challenges—through the comprehensive creation, sharing, and use of knowledge, and the effective education of adult learners. The curriculum is focused on organizational change (e.g., Total Quality, Six Sigma, re-engineering, Malcolm Baldrige National Quality Award) and organizational learning, including the deployment of corporate universities.

AMDS 8335  Principles of Knowledge Management (4 cr.)
AMDS 8800  Epistemology and the Practice of Knowledge and Learning Management (4 cr.)
Nonprofit Management and Leadership Specialization (12 cr.)
The Nonprofit Management and Leadership specialization prepares students to apply entrepreneurial ideas and concepts to the nonprofit sector as they assume leadership roles in the rapidly changing nonprofit sector. Financial management, accountability, program effectiveness, civic empowerment strategies, and sophisticated management practices are key to nonprofit success.

MMPA 6340  Leadership for the Nonprofit Sector (4 cr.)
MMPA 6341  Fund Raising and Marketing in Nonprofit Organizations (4 cr.)
MMPA 6342  Nonprofit Management (4 cr.)

Public Management and Leadership Specialization (12 cr.)
Fundamental, rapid, and unpredictable change is ubiquitous in public administration, making leadership more critical than ever. This specialization provides professionals with the advanced knowledge and skills to assume the interrelated responsibilities of managing and leading during a time of change in any area of public administration.

MMPA 6390  Strategic Context of Public Management and Leadership (4 cr.)
MMPA 6391  Transformative Change in a Shared-Power World (4 cr.)
MMPA 6392  The Language of Leadership (4 cr.)

Public Policy Specialization (12 cr.)
The Public Policy specialization provides students with a critical understanding of the context within which organizations and individuals act in a democratic society. It prepares students to function knowledgeably within this context and to help shape public policy development and implementation.

MMPA 6380  Policy and Politics in American Political Institutions (4 cr.)
MMPA 6381  Program Evaluation (4 cr.)
MMPA 6382  Public Policy and Finance (4 cr.)

Public Safety Management Specialization (12 cr.)
The emergency situations of today’s complex environments call for a new leadership approach and effective collaboration among public safety professionals. The Public Safety Management specialization offers emergency response professionals the skills to lead, manage, and motivate others during emergencies; to build confident and capable teams; and to address challenging ethical situations that may arise during the course of duty.

MMPA 6360  Public Safety Issues (4 cr.)
MMPA 6361  Managing Public Safety Organizations (4 cr.)
MMPA 6362  Ethics in Preserving Public Safety (4 cr.)
Dual-Degree Program

Students can obtain a dual degree by combining the M.P.A. program with the Walden’s Master of Business Administration (M.B.A.) program.

Students who have applied and are admitted to a dual-degree program are able to complete the entire program with fewer credits than would be needed if the two degree programs were completed separately.

Note: Students start and complete one program before starting the second program.

Ph.D. in Public Policy and Administration

To have robust communities, leaders must have the vision to create plans, develop policies, and manage resources within economic sectors. We need leaders in public service whose practice is grounded in scientific inquiry and scholarship, and who are prepared not only to improve our democratic institutions, but also to add to our understanding of those institutions. The Ph.D. in Public Policy and Administration (P.P.A.) program prepares students to meet the challenges of social governance and effective service delivery as government and nonprofit institutions become increasingly intertwined. The program educates students on critical public policy issues and the latest best practices training to promote social change through effective, forward-thinking management.

Specializations

- General Program
- Criminal Justice
- Health Services
- Homeland Security Policy and Coordination
- International Nongovernmental Organizations (NGOs)
- Knowledge Management
- Nonprofit Management and Leadership
- Public Management and Leadership
- Public Policy
- Public Safety Management

Degree Requirements

Mixed-Model Specializations


- 132 quarter credits
- Professional Development Plan and Program of Study
- Core courses (40 cr.)
• Foundation Research Sequence (14 cr.)
• Specialized KAMs (36 cr.)*
• Satisfactory progress in all SBSF 7100 registrations
• Specialization courses (12 cr.)
• Proposal, dissertation, and oral presentation (30 cr.)
• Minimum enrollment of 8–9 quarters, depending on the transfer of credits awarded
• 20 days of academic residency (two 4-day and two 6-day residencies)

KAM-Based Specialization

*Option for KAM VII
Based on background and specific dissertation objectives, students often have very different research needs. Therefore, with permission of their faculty mentor, students in either the mixed-model or the KAM-based program may fulfill the KAM VII requirement by completing one of the following options:
• Essential skills courses that the student’s faculty mentor has identified.
• Three related graduate-level courses that support the student’s research or career needs. (These courses are in addition to the three specialization courses required in the mixed-model program.)
• An independent study on a critical topic and two complementary graduate-level courses that support the student’s research interest.

Mixed-Model Curriculum

The mixed-model program combines a course-based core curriculum with a series of research seminars and an advanced KAM-based curriculum, which allows students to apply their learning to real-world challenges faced in today’s public policy and administration forums.

Core Courses (40 cr.)

PPPA 8000 Foundations for Graduate Study (4 cr.)
PPPA 8105 Managing at the Boundaries: Creative Thinking for Social Change (4 cr.)
PPPA 8200 Intellectual Traditions of Public Policy and Public Administration (4 cr.)
PPPA 8305 Professional Leadership and Ethics (4 cr.)
PPPA 8400 Nonprofit and Governmental Budgeting and Finance (4 cr.)
PPPA 8500 Organizational Theory and Behavior (4 cr.)
PPPA 8600 Human Resource Management (4 cr.)
PPPA 8700 Policy Analysis (4 cr.)
PPPA 8800 Strategic Management of Information (4 cr.)
PPPA 8002 KAM Writing Course (2 cr.)

Foundation Research Sequence (14 cr.)

SBSF 8417 Research Seminar I: Human Inquiry and Science (4 cr.)
PPPA 8427 Research Seminar II: Research Methods (5 cr.)
PPPA 8437 Research Seminar III: Data Analysis (5 cr.)
Specialized KAMS (36 cr.)
Walden’s unique curriculum allows students to focus on the areas most beneficial to their professional needs and goals. For example, students might concentrate on state and local government, public finance, or health administration while completing the following KAMs:

**Specialized KAM V: Democratic Governance (12 cr.)**
*Breadth:* PPPA 8510  Theories of Democratic Governance (4 cr.)
*Depth:* PPPA 8520  Contemporary Research and Issues in Democratic Governance (4 cr.)
*Application:* PPPA 8530  Professional Practice Application of Democratic Governance (4 cr.)

**Specialized KAM VI: Organizational Leadership and Change (12 cr.)**
*Breadth:* PPPA 8612  Classical and Emerging Paradigms of Leadership and Organizational Change (4 cr.)
*Depth:* PPPA 8622  Current Research on Leadership and Organizational Change (4 cr.)
*Application:* PPPA 8632  Professional Practice Application of a Theory of Leadership and Organizational Change (4 cr.)

**Specialized KAM VII: Specialization Topics (12 cr.)**
*Breadth:* PPPA 8710  Theories in Selected Specialization Topic (4 cr.)
*Depth:* PPPA 8720  Current Research in Specialization Topic (4 cr.)
*Application:* PPPA 8730  Professional Practice Application of Specialization Topic (4 cr.)

**General Program (12 cr.)**
Students may complete a General Program by taking any three specialization courses from any of the Public Policy and Administration specializations listed below.

**Criminal Justice Specialization (12 cr.) – Available June 2007**
This specialization is designed for criminal justice professionals, including supervisors and managers in policing, courts, corrections, security, and associated support agencies, who aspire to move into management and administrative assignments. The coursework includes an in-depth review and discussion of contemporary decision-making models and issues confronting the American criminal justice system.

PPPA 8350  Historical and Contemporary Issues in Criminal Justice (4 cr.)
PPPA 8351  Policy Analysis in the Criminal Justice System (4 cr.)
PPPA 8352  Leadership: Putting Theory Into Practice in Criminal Justice Administration (4 cr.)

**Health Services Specialization (12 cr.)**
Americans have seen radical changes in the health care industry over the past several years. They’ve watched it go from an independent structure to a collection of major business enterprises, which in turn have changed the way health care is delivered. As the health care environment changes, managers must quickly adapt to succeed. The Health Services specialization helps students gain valuable knowledge about health delivery systems, health policy, health administration, and health finance centers, so they can manage effectively and successfully in this unique environment.

PUBH 6130  Health Care Organization, Policy, and Administration (4 cr.)
Homeland Security Policy and Coordination Specialization (12 cr.)

Today’s complex public safety environment demands smart policy on emergency response strategies. This specialization prepares homeland security professionals to implement protective measures without compromising individual rights and freedoms. With this knowledge, students are equipped to effectively develop policy to protect individuals’ safety and freedom.

- PPPA 8320 Public Policy Implications of Terrorism Legislation and Policies (4 cr.)
- PPPA 8321 Terrorism: A Systemic Approach for Emergency Preparedness (4 cr.)
- PPPA 8322 Critical Incident Planning and Leadership (4 cr.)

International Nongovernmental Organizations (NGOS) Specialization (12 cr.)

In an era of increasing globalization, it is important for leaders of nonprofit organizations and governmental departments at the local, state, and national levels to know how to operate in an international environment. This specialization explores how countries organize, regulate, and foster nongovernmental activities; how international intergovernmental organizations operate; and how representatives of these organizations can learn from, partner with, and work within organizations worldwide. By focusing on the effects of globalization and the cultures and sociopolitical environments of diverse nations and organizations, students in this specialization learn how to work effectively with nongovernmental organizations, voluntary organizations, and intergovernmental organizations around the world.

- PPPA 8330 Holding Up the Mirror: Understanding Different Cultures and Increasing Global Consciousness (4 cr.)
- PPPA 8331 Crossing Borders: U.S. and International NGO Organizational Cultures and Environments (4 cr.)
- PPPA 8332 Placing NGOs in the Global Context (4 cr.)

Knowledge Management Specialization (12 cr.)

The Knowledge Management specialization prepares students to develop innovative solutions to their organizations’ most critical challenges—through the comprehensive creation, sharing, and use of knowledge and the effective education of adult learners. The curriculum is focused on organizational change (e.g., Total Quality, Six Sigma, re-engineering, Malcolm Baldrige National Quality Award) and organizational learning, including the deployment of corporate universities.

- AMDS 8335 Principles of Knowledge Management (4 cr.)
- AMDS 8800 Epistemology and the Practice of Knowledge and Learning Management (4 cr.)
- AMDS 8801 Principles of Learning Management (4 cr.)
Nonprofit Leadership and Management Specialization (12 cr.)
Investment in social capital is as important as investment in physical and human capital. Without constant attention to democratic and social institutions, a society and its individuals cannot prosper. Recently, considerable attention has been paid to the decline in social capital in the United States and to declining participation in many social institutions. The Nonprofit Leadership and Management specialization investigates these issues and prepares students to become knowledgeable social-change agents through scholarly inquiry, applied research, and effective participation in these nonprofit institutions.

PPPA 8340 Leadership for the Nonprofit Sector (4 cr.)
PPPA 8341 Fund Raising and Marketing in Nonprofit Organizations (4 cr.)
PPPA 8342 Nonprofit Management (4 cr.)

Public Management and Leadership Specialization (12 cr.)
Public services are being delivered through alternative nongovernmental institutions, and citizens and their elected officials are expecting more from those who manage public and nonprofit institutions. The Public Management and Leadership specialization prepares scholar-practitioners to lead reform in public administration.

PPPA 8390 Strategic Context of Public Management and Leadership (4 cr.)
PPPA 8391 Transformative Change in a Shared-Power World (4 cr.)
PPPA 8392 The Language of Leadership (4 cr.)

Public Policy Specialization (12 cr.)
Developing and implementing forward-thinking public policy and engaging citizens in the process are critical to the health of our society. Public and nonprofit administrators who are intimately involved in both executive and legislative/board policy- and decision-making play an important role in policy development and implementation. By allowing students to apply their research in practical ways, the Public Policy specialization prepares students not only to form and understand policies, but also to manage their implementation and acceptance.

PPPA 8380 Policy and Politics in American Political Institutions (4 cr.)
PPPA 8381 Program Evaluation (4 cr.)
PPPA 8382 Public Policy and Finance (4 cr.)

Public Safety Management Specialization (12 cr.)
The emergency situations of today’s complex environments call for a new leadership approach and effective collaboration among public safety professionals. The specialization in Public Safety Management offers emergency response professionals the skills to lead, manage, and motivate others during emergencies; to build confident and capable teams; and to address challenging ethical situations that may arise during the course of duty.

PPPA 8360 Public Safety Issues (4 cr.)
PPPA 8361 Managing Public Safety Organizations (4 cr.)
PPPA 8362 Ethics in Preserving Public Safety (4 cr.)
Dissertation (30 cr.)
PPPA 9000 Dissertation (30 cr.)

KAM-Based Curriculum
The KAM-based program is designed for students who have earned an M.P.A. at another institution, have a clear idea about the specific research area in which they seek to gain expertise, prefer a semi-independent learning environment, and are strong critical thinkers and scholarly writers.

Core Courses (20 cr.)
PPPA 8000  Foundations for Graduate Study (4 cr.)*
PPPA 8002  KAM Writing Course (2 cr.)*
PPPA 8105  Managing at the Boundaries: Creative Thinking for Social Change (4 cr.)
PPPA 8400  Nonprofit and Governmental Budgeting and Finance (4 cr.)
PPPA 8700  Policy Analysis (4 cr.)

*Note: Beginning March 2007, SBSF 8005 Foundations for Doctoral Study (6 cr.) will replace PPPA 8000 and PPPA 8002 as a core course requirement.

Core KAMs I–III (42 cr.)

Core KAM I: Principles of Societal Development (14 cr.)
Perspectives in social and behavioral sciences as they influence human values and lifestyles, communication, social networks, and forecasting alternative futures are addressed. Students begin to integrate theoretical constructs into practical applications for their own interest areas.

Breadth: PPPA 8110  Theories of Societal Development (5 cr.)
Depth: PPPA 8120  Current Research in Societal Development (5 cr.)
Application: PPPA 8130  Professional Practice and Societal Development (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)
This KAM covers basic theories and current research on biological, psychosocial, cognitive, and affective human development, including normal developmental patterns and crises that may occur. Students explore developmental questions in the context of both chronological time and underlying physical, social, and psychological experiences. Students integrate these theoretical constructs into practical applications for their own interest areas.

Breadth: PPPA 8210  Theories of Human Development (5 cr.)
Depth: PPPA 8220  Current Research in Human Development (5 cr.)
Application: PPPA 8230  Professional Practice and Human Development (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
This is an introduction to systems theories from various disciplines. The primary models of structured system theories are presented as a background and theoretical framework for the other knowledge areas. Also considered are theories that impact micro and macro levels of social, political, and economic
systems. Students integrate these theoretical constructs into practical applications for their own interest areas.

*Breadth*: PPPA 8310  Theories of Organizational and Social Systems (5 cr.)  
*Depth*: PPPA 8311  Current Research in Organizational and Social Systems (5 cr.)  
*Application*: PPPA 8312  Professional Practice and Organizational and Social Systems (4 cr.)

**Foundation Research Sequence (12 cr.)**

The research sequence is composed of three courses, online seminars that require students to participate in weekly, Web-based discussions. For those students who need additional help with statistical analyses, the third seminar combines online activities and a 12-hour face-to-face meeting at Walden’s Winter Session. Faculty members guide discussions, require specific readings, and evaluate assignments.

SBSF 8417  Research Seminar I: Human Inquiry and Science (4 cr.)  
PPPA 8427  Research Seminar II: Research Methods (4 cr.)  
PPPA 8437  Research Seminar III: Data Analysis (4 cr.)

**Specialized KAMS (36 cr.)**

The specialized KAM curriculum allows students to focus on the areas most beneficial to their professional needs and goals. For example, students might concentrate on state and local government, public finance, health administration, or any other public policy and administration area of study while completing these KAMS. Prior to declaring a specialization, students must first complete the core courses, core KAMs, and SBSF 8417 Research Seminar I: Human Inquiry and Science. Students then must submit a completed *Intent to Declare Specialization and a Plan of Study* form for the specialized KAMS to their faculty mentor for approval. The faculty mentor will forward the approved form to the dean or the dean’s designee for final approval. Students may not take the second or third research seminars until they begin working on their final two KAMS.

**Specialized KAM V: Democratic Governance (12 cr.)**  
*Breadth*: PPPA 8510  Theories of Democratic Governance (4 cr.)  
*Depth*: PPPA 8520  Contemporary Research and Issues in Democratic Governance (4 cr.)  
*Application*: PPPA 8530  Professional Practice Application of Democratic Governance (4 cr.)

Building upon the core curriculum, this KAM examines issues of democratic governance and provides students with the theoretical underpinnings in their chosen area of specialization necessary for doctoral-level research. This KAM explores the fundamental theories, current literature, and best practices within the area of specialization the student has chosen, as it relates to democratic governance in public administration, public policy, or nonprofit or nongovernmental organizations (NGOs) in modern society. The emphasis is on the context in which public and nonprofit leaders function and the social institutions that influence public policy and guide administrative decision-making.

**Specialized KAM VI: Organizational Leadership and Change (12 cr.)**  
*Breadth*: PPPA 8612  Classical and Emerging Paradigms of Leadership and Organizational Change (4 cr.)  
*Depth*: PPPA 8622  Current Research on Leadership and Organizational Change (4 cr.)  
*Application*: PPPA 8632  Professional Practice Application of a Theory of Leadership and Organizational Change (4 cr.)
KAM VI explores the fundamental theories, current literature, and best practices within the area of specialization the student has chosen within the context of organizational leadership and change. The emphasis is on the context in which governmental and nonprofit leaders use democratic processes to lead social institutions, affect public policy, and guide administrative decision-making. Students explore the ethical dimensions and boundary-spanning functions they perform as leaders. How public officials influence organizational and social change is also examined. Learners are expected to demonstrate a thorough knowledge of leadership and how it is developed, including an understanding of various theories, models, or approaches to the study of leadership and organizational change.

**Specialized KAM VII: Specialization Topic—Research Design (12 cr.)**

*Broadth: PPPA 8710 Theories in Research Design Specialization Topic (4 cr.)
Depth: PPPA 8720 Current Research in Research Design Specialization Topic (4 cr.)
Application: PPPA 8730 Professional Practice Application of Research Design Specialization Topic (4 cr.)*

KAM VII is designed to (a) assure that students thoroughly understand the appropriateness and effectiveness of their proposed dissertation research methodology or (b) enable them to do an in-depth study of the literature around specific aspects of their dissertation topic.

- When focused on the research method, the breadth portion of KAM VII compares and contrasts the selected method against other research methods. The depth portion presents the strengths and weaknesses of the selected method and outlines key steps that must be taken to ensure successful use of the approach. Depending upon the method, the depth portion may also include the traditional annotated bibliography addressing recent uses of this technique. (The student’s faculty mentor or faculty assessor, whoever reviews the KAM, determines the need for an annotated bibliography.) The application portion provides the details of how the selected method will be specifically used in the student’s research.
- When focused upon a specific aspect of the student’s dissertation topic, this KAM should follow the form of the other KAMs, highlighting key theorists in the topic, looking at recent research in the topic, and applying this information to a real-world application.

**Dissertation (30 cr.)**

PPPA 9000 Dissertation (30 cr.)
College of Social, Behavioral, and Health Sciences

The College of Social, Behavioral, and Health Sciences is composed of four schools—Health Sciences, Nursing, Psychology, and Social Service. The School of Health Sciences offers doctoral programs in Health Services with three specializations and in Public Health with two specializations, as well as a Master of Public Health program. The School of Nursing offers a Master of Science program in Nursing. The School of Psychology offers a doctoral program in psychology with six specializations and Master of Science programs in Psychology and in Mental Health Counseling. It also offers a post-doctoral certificate program. The School of Social Service offers a doctoral program with eight specializations.

Vision

The College of Social, Behavioral, and Health Sciences envisions a 21st century in which the contributions of social, behavioral, and health sciences will transform the provision of preventative mental health, general health, and public health services that build on the competencies of and address the needs of the global community.

Mission

The College of Social, Behavioral, and Health Sciences provides culturally and contextually relevant educational programs in the social, behavioral, and health sciences based in the scholar-practitioner model for a diverse array of learners to enhance their ability to transform their capacity to act as social change agents.

Goals

- To create an educational environment where learners are able to cultivate their existing transformational professional knowledge, skills, and competencies.
- To prepare professional leaders who are empowered to promote social change within individuals, groups, and organizations on local, national, and global levels in the context of professional ethics and standards.
- To enable learners to integrate social, behavioral, and health theory, research, established methods of scientific inquiry, and evidence-based practice to enhance the greater social good.
- To provide opportunities for interdisciplinary study and research collaboration.
School of Health Sciences

Master of Public Health (M.P.H.)

Successful solutions to community health problems depend on understanding how complex local, regional, national, and global factors influence public health practice. Future public health leaders will generate new information from interdisciplinary studies and develop it into unique, community-based public health programs.

The Master of Public Health (M.P.H.) is a practice-oriented terminal degree program designed to prepare students who have little or no experience in community health to work with communities to map their assets and needs. Graduates will be prepared to develop and evaluate culturally relevant interventions to promote public health.

Degree Requirements

- 56 quarter credits
- Foundation course: PUBH 6000 (6 cr.)
- Core courses (44 cr.)
- Practicum (6 cr.)
- Minimum 3.0 GPA
- Continuing registration

Curriculum

Foundation Course (6 cr.)

PUBH 6000  Foundations for Graduate Study in Public Health (6 cr.)

Core Courses (44 cr.)

PUBH 6105  Social and Behavioral Dimensions of Health (4 cr.)
PUBH 6110  Principles of Biostatistics (4 cr.)
PUBH 6120  Principles of Epidemiology (4 cr.)
PUBH 6130  Health Care Organization, Policy, and Administration (4 cr.)
PUBH 6140  Fundamentals of Environmental Health and Risk Assessment (4 cr.)
PUBH 6200  Advanced Psychosocial Theories of Health and Health Behavior (4 cr.)
PUBH 6420  Principles of Community Health (4 cr.)
PUBH 6430  Social and Behavioral Research Methods (4 cr.)
PUBH 6440  Public Health Ethics (4 cr.)
PUBH 6450  Program Planning and Evaluation (4 cr.)
PUBH 6460  Health Education and Community Advocacy (4 cr.)
Practicum (6 cr.)

PUBH 6620  Field Practicum in Community Health I (3 cr.)
PUBH 6621  Field Practicum in Community Health II (3 cr.)

The practicum is designed to provide students who have finished their coursework with the opportunity to synthesize knowledge, to develop competence in professional practice in the foundation areas identified by the Council on Education for Public Health, to apply knowledge to the solution of public health problems, and to develop a respect for and a commitment to continued professional knowledge.

The practicum is a student-arranged, 300-hour field training experience at a site in the United States. In certain circumstances, students may receive approval for a non-U.S. training site from the M.P.H. faculty chair; however, that approval must be sought in writing prior to admission to the M.P.H. program. The practicum requires a minimum of 300 agency work hours, of which no fewer than 250 hours are assigned to direct or indirect community health practice activities. The remaining 50 hours are devoted to individual supervision, group supervision, record keeping, observation, and related training activities.

The field practicum takes place in conjunction with registration in the six-credit seminar series PUBH 6620 and PUBH 6621. The 300 hours of agency service may take place only during registration for PUBH 6620/6621. All work hours must occur on or after the official start date of the approved quarter and may not go beyond the end date of the quarter. Students may not log in any practicum hours outside of registration for PUBH 6620/6621. Students who cannot complete the practicum hours in two quarters will be registered for PUBH 6621 for each additional quarter needed.

The practicum is a capstone experience. The student must have completed, or be in his or her final two quarters of coursework to begin the practicum. Additionally, the student must be in good academic standing. Students are advised to begin seeking a practicum placement as early as possible, no later than two terms before they plan to begin the practicum. Details about the practicum, the required forms, the approval process, and important practicum application deadlines are available through the Personal Start Page (PSP).

Ph.D. in Public Health

The Ph.D. in Public Health program focuses on seeking solutions to significant public health problems by applying and integrating new knowledge into public health research and professional practice settings. The program offers students the opportunity to specialize their studies in Community Health Promotion and Education or in Epidemiology. Both specializations emphasize the development and demonstration of strong research skills that help students pursue post-doctoral careers in academia or in public and private organizations and institutions.

Specializations

- Community Health Promotion and Education
- Epidemiology
Degree Requirements

- 122 quarter credits
- Professional Development Plan and Program of Study
- Foundational and core courses (62 cr.)
- Specialization courses (30 cr.)
- Research proposal, dissertation, and oral presentation (30 cr.)
- Minimum 10 quarters enrollment
- 20 days of academic residency (two 4-day and two 6-day residencies)

Foundational and Core Curricula

Foundational Curriculum (38 cr.)

The foundational curriculum helps students entering the Ph.D. program without transferring in equivalent prior coursework to obtain core competencies in public health.

- PUBH 6000 Foundations for Graduate Study in Public Health (6 cr.)
- PUBH 6105 Social and Behavioral Dimensions of Health (4 cr.)
- PUBH 6110 Principles of Biostatistics (4 cr.)
- PUBH 6120 Principles of Epidemiology (4 cr.)
- PUBH 6130 Health Care Organization, Policy, and Administration (4 cr.)
- PUBH 6140 Fundamentals of Environmental Health and Risk Assessment (4 cr.)
- PUBH 6420 Principles of Community Health (4 cr.)
- PUBH 6430 Social and Behavioral Research Methods (4 cr.)
- PUBH 6440 Public Health Ethics (4 cr.)

Core Curriculum (24 cr.)

- PUBH 8010 Promoting Population Health (5 cr.)
- PUBH 8015 Administration and Leadership of Public Health Programs (5 cr.)
- PUBH 8020 Public Health Informatics (5 cr.)
- PUBH 8427 Research Seminar II: Design in Public Health Research (5 cr.)
- SBSF 8417 Research Seminar I: Human Inquiry and Science (4 cr.)

Specialized Curriculum

Community Health Promotion and Education Specialization

The Community Health Promotion and Education specialization focuses on the medical, social, political, ethical, and economic factors that contribute to the overall well-being of public health systems and the communities they serve.

- PUBH 8200 Organizing Community Action for Health Promotion and Education (5 cr.)
- PUBH 8210 Public Campaigns for Health Promotion and Education (5 cr.)
- PUBH 8215 Public Health Policy Design and Implementation (5 cr.)
- PUBH 8220 Health Promotion and Education in Communities of Diverse Populations (5 cr.)
Epidemiology Specialization

The Epidemiology specialization focuses on the scientific understanding of the causes, distribution, control, and prevention of disease in populations.

- PUBH 8300  Epidemiology of Infectious and Acute Diseases (5 cr.)
- PUBH 8310  Social and Behavioral Epidemiology (5 cr.)
- PUBH 8320  Environmental and Occupational Epidemiology (5 cr.)
- PUBH 8330  Epidemiology of Cancer and Other Chronic Diseases (5 cr.)
- PUBH 8340  Molecular and Genetic Epidemiology (5 cr.)
- PUBH 8350  Field Methods and Data Analysis in Epidemiology (5 cr.)

Dissertation (30 cr.)

- PUBH 9000 Public Health Dissertation (30 cr.)

M.P.H. Option

Students enrolled in the Ph.D. Program in Public Health may earn their Master in Public Health (M.P.H.) degree by completing the Foundational Curriculum and the following additional courses (18 cr.):

- PUBH 6200  Advanced Psychosocial Theories of Health and Human Behavior (4 cr.)
- PUBH 6450  Program Planning and Evaluation (4 cr.)
- PUBH 6460  Health Education and Community Advocacy (4 cr.)
- PUBH 6620  Field Practicum in Community Health I (3 cr.)
- PUBH 6621  Field Practicum in Community Health II (3 cr.)

Ph.D. in Health Services

The Ph.D. in Health Services program addresses contemporary health and health care needs, by preparing scholar-practitioners to apply solutions derived from social and behavioral science research to the real-world challenges practicing health professionals face every day. The program also enables individuals to pursue careers in research and teaching.

Specializations

- General Program
- Community Health Promotion and Education
- Health Management and Policy
Degree Requirements

- 133–134 quarter credits minimum
- Foundation course: SBSF 8005 (6 cr.)
- Professional Development Plan and Program of Study
- Core KAMs and the Foundation Research Sequence (56 cr.)
- Specialized KAMs (42 cr.) or coursework (41 cr.)
- Satisfactory progress in all SBSF 7100 registrations
- Proposal, dissertation, and oral presentation (30 cr.)
- Minimum 10 quarters enrollment
- 20 days of academic residency (two 4-day and two 6-day residencies)

Core Curriculum

All students seeking the Ph.D. in Health Services degree complete the Foundation course (SBSF 8005), the Foundation Research Sequence, and three KAMs that focus on the social and behavioral science foundations important to all professions. The depth and application components of the core KAMs focus on students’ preferred area of study; KAMs are therefore listed under each specialization.

Foundation Course (6 cr.)

*SBSC 8005 Foundations for Doctoral Study (6 cr.)*

All beginning Ph.D. in Health Services students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Foundation Research Sequence (14 cr.)

The first and second research courses are online seminars, requiring students to participate in weekly, Web-based discussions. The third course combines online seminar activities and a 12-hour face-to-face meeting with a Walden residency. Faculty members guide discussions, require specific readings and written assignments, and evaluate assignments.

SBSC 8417 Research Seminar I: Human Inquiry and Science (4 cr.)
HLTH 8427 Research Seminar II: Design in Health Services Research (5 cr.)
HLTH 8437 Research Seminar III: Data Analysis in Health Services Research (5 cr.)

Specialized Curriculum

In addition to the core KAMs, students in the General Program and the Health Management and Policy specialization must complete three specialized KAMs unique to the Health Services curriculum. Students pursuing the Community Health Promotion and Education specialization complete a series of online public health courses in place of the specialized KAMs.
General Program

The General Program in Health Services takes an interdisciplinary approach to health services study. This may include multiple issues of health and human behavior, including health and healing, health and professional behavior, health and social behavior, health and life span issues, or a self-designed concentration.

Core KAMs I–III (42 cr.)

Core KAM I: Principles of Societal Development (14 cr.)
In this KAM, students analyze public policy related to an important health services issue, based on both theory and research.

*Breadth*: SBSF 8110  Theories of Societal Development (5 cr.)
*Depth*: HLTH 8120  Current Research in Societal Development (5 cr.)
*Application*: HLTH 8130  Professional Practice and Societal Development (4 cr.)

Core KAM II: Principles of Human Development (14 cr.)
This KAM provides students with a critical analysis of major human development theories. Students perform a research-based examination of a human development theory with applicability to health services. This KAM also includes a theory- and research-based design of a health program using health behavior and utilization models that include human development variables.

*Breadth*: SBSF 8210  Theories of Human Development (5 cr.)
*Depth*: HLTH 8220  Current Research in Human Development (5 cr.)
*Application*: HLTH 8230  Professional Practice and Human Development (4 cr.)

Core KAM III: Principles of Organizational and Social Systems (14 cr.)
This KAM offers students a critical examination of major systems theories and theorists. Students analyze and compare health systems involving different delivery, international, or philosophical systems. This KAM also includes the design, implementation, and execution of a health services system evaluation.

*Breadth*: SBSF 8310  Theories of Organizational and Social Systems (5 cr.)
*Depth*: HLTH 8320  Current Research in Organizational and Social Systems (5 cr.)
*Application*: HLTH 8330  Professional Practice and Organizational and Social Systems (4 cr.)

Specialized KAMs (42 cr.)

Specialized KAM V: Advanced Theory, Methods, and Practice in Health Services (14 cr.)
In this KAM, students analyze issues surrounding contemporary health services within the context of community health, health administration, or health and human behavior. They examine contemporary concepts and methods of community health and human behavior, strategic management of health services, or alternative health care. They also explore the application of selected concepts and methods, and their professional role within a specific theoretical and applied context in health services.

*Breadth*: HLTH 8510  Health Services in the Contemporary Context (5 cr.)
*Depth*: HLTH 8520  Current Concepts and Methods in Health Services (5 cr.)
*Application*: HLTH 8530  Integrative Professional Practice in Health Services (4 cr.)

Specialized KAM VI: Contemporary Issues and the Ethical Delivery of Health Services (14 cr.)
In this KAM, students analyze contemporary and future issues in a specific area of health services and their implications as considered from the perspective of various ethical paradigms. They examine a
selected health services issue from the perspective of various ethical decision-making models. They also apply theory- and research-based ethical models to a health services setting.

**Breadth:** HLTH 8610  Health Services Delivery and Ethical Implications (5 cr.)  
**Depth:** HLTH 8620  Health Services Delivery and Ethical Decision-Making (5 cr.)  
**Application:** HLTH 8630  Ethical Theories Applied in Health Services (4 cr.)

**Specialized KAM VII: Advanced Case Study in Health Services (14 cr.)**  
This KAM provides an examination of methods and techniques employed in case studies and applied change in a health services setting. Students analyze current and upcoming social problems in a specific area of health services and their corresponding change interventions and implications. This KAM also includes the design, execution, and evaluation of a case study demonstrating the process of planned change in a health services setting.

**Breadth:** HLTH 8710  Theories of Case Study Research and Applied Change in Health Services (5 cr.)  
**Depth:** HLTH 8720  Relating Change Theories to Practice in Health Services (5 cr.)  
**Application:** HLTH 8730  A Case Study of Applied Change in Health Services (4 cr.)

**Dissertation (30 cr.)**  
HLTH 9000  Dissertation (30 cr.)

**Community Health Promotion and Education Specialization**

The Community Health Promotion and Education specialization prepares students to provide leadership in the planning, administration, and management of health promotion and education programs, including leadership in conducting evaluative research on the effectiveness of those programs. This mixed-model specialization combines KAM-based learning and online courses, providing a comprehensive range of community health promotion and education competencies.

**Public Health Behavioral Science Foundation Courses (16 cr.)**  
These courses are part of the Public Health master’s-level curriculum and provide a foundation for the advanced specialized courses in Health Promotion and Education. All four of these courses must be successfully completed before a student may enroll in the advanced specialization (8000-level) courses.

PUBH 6105  Social and Behavioral Dimensions of Health (4 cr.)  
PUBH 6200  Advanced Psychosocial Theories of Health and Health Behavior (4 cr.)  
PUBH 6450  Program Planning and Evaluation (4 cr.)  
PUBH 6460  Health Education and Community Advocacy (4 cr.)

**Core KAMs I–III (42 cr.)**  
Core KAMs I–III must also be completed before a student may enroll in the advanced specialization (8000-level) courses. Students are required to complete SBSF 8417 and at least one KAM within one year (four full quarters) of completion of SBSF 8005.

**Core KAM I: Principles of Societal Development (14 cr.)**  
KAM I provides students with a critical analysis of classic and contemporary theories of social and cultural change. Students examine the social history of health promotion and education through literary classics from the humanities. They perform research-based analysis of the present and projected impact of societal forces on the health promotion and education profession or type/setting of service delivery.
Students analyze public policy related to an important health promotion and education issue, based on both theory and research.

**Breadth**: SBSF 8110  Theories of Societal Development (5 cr.)  
**Depth**: HLTH 8125  Current Research in Societal Development: Health Promotion and Education (5 cr.)  
**Application**: HLTH 8135  Professional Practice and Societal Development: Health Promotion and Education (4 cr.)

**Core KAM II: Principles of Human Development (14 cr.)**  
This KAM provides students with a critical analysis of major theories of human development. Students perform a research-based examination of a human development theory relevant to health promotion and education. This KAM also includes a theory- and research-based design of a health promotion and education program using health behavior and utilization models that include human development variables.

**Breadth**: SBSF 8210  Theories of Human Development (5 cr.)  
**Depth**: HLTH 8225  Current Research in Human Development: Health Promotion and Education (5 cr.)  
**Application**: HLTH 8235  Professional Practice and Human Development: Health Promotion and Education (4 cr.)

**Core KAM III: Principles of Organizational and Social Systems (14 cr.)**  
This KAM offers students a critical examination of major systems theories and theorists. Students analyze and compare different delivery, international, or philosophical systems pertaining to health promotion and education. This KAM also includes the design, implementation, and execution of an evaluation of a health promotion and education system.

**Breadth**: SBSF 8310  Theories of Organizational and Social Systems (5 cr.)  
**Depth**: HLTH 8325  Current Research in Organizational and Social Systems: Health Promotion and Education (5 cr.)  
**Application**: HLTH 8335  Professional Practice and Organizational and Social Systems: Health Promotion and Education (4 cr.)

**Advanced Specialization Courses (25 cr.)**  
Students must have completed core KAMs I–III and all public health behavioral science foundation courses prior to enrolling in these advanced specialization courses.

PUBH 8200  Organizing Community Action for Health Promotion and Education (5 cr.)  
PUBH 8210  Public Campaigns for Health Promotion and Education (5 cr.)  
PUBH 8215  Public Health Policy Design and Implementation (5 cr.)  
PUBH 8220  Health Promotion and Education in Communities of Diverse Populations (5 cr.)  
PUBH 8225  Design and Analysis of Community Trials (5 cr.)

**Dissertation (30 cr.)**  
HLTH 9000  Dissertation (30 cr.)

**Health Management and Policy Specialization**  
In the Health Management and Policy specialization, students concentrate on a specific functional management or policy area, on the management of services/organizations dedicated to one stage in the
continuum of care, or on one institutional/industry-specific management or policy area that cuts across different levels of care. This specialization must be studied within the “integrated delivery system” model.

The **functional management or policy approach** includes the following categories:
- Clinical Resources Management
- Facilities Management
- Financial Management
- Human Resources Management
- Information Management/Health Information
- Marketing Management
- Operations Management
- Public Policy Management

The **continuum of care approach** focuses on the administration of services and organizations associated with one of the following levels of care:
- Preventive Care
- Intake/Screening
- Diagnosis
- Treatment
- Restorative Care
- Continuing Care
- Evidence-Based Public Health

The **institutional/industry-specific approach** concentrates on the administration, management, and policy issues of one of the following organizational types encompassing different levels of care:
- Alternative Delivery Systems
- Consulting Firms
- Consumer Health Advocacy
- Foundations
- Higher Education
- Industry Suppliers
- Insurance Providers
- International Health Agencies
- Managed Care Organizations
- Military/Veterans Health Facilities
- Professional Associations

Students who want to pursue this program must declare the specialization by the end of the second quarter of enrollment in their Professional Development Plan and Program of Study.

**Core KAMs I–III (42 cr.)**

**Core KAM I: Principles of Societal Development (14 cr.)**
KAM I provides students with a critical analysis of classic and contemporary theories of social and cultural change. Students examine the social history of management and policy through literary classics from the humanities. They perform research-based analysis of the present and projected impact of societal forces on the health management and policy profession or a health services organization or industry. Students analyze public policy related to an important health services issue, based on both theory and research.
**Breadth:** SBSF 8110  Theories of Societal Development (5 cr.)  
**Depth:** HLTH 8123  Current Research in Societal Development: Health Management and Policy (5 cr.)  
**Application:** HLTH 8133  Professional Practice and Societal Development: Health Management and Policy (4 cr.)

**Core KAM II: Principles of Human Development (14 cr.)**  
This KAM provides students with a critical analysis of major human development theories. Students perform a research-based examination of a human development theory relevant to health management and policy. This KAM also includes a theory- and research-based design of a health program using health behavior and utilization models that include human-development variables.

**Breadth:** SBSF 8210  Theories of Human Development (5 cr.)  
**Depth:** HLTH 8223  Current Research in Human Development: Health Management and Policy (5 cr.)  
**Application:** HLTH 8233  Professional Practice and Human Development: Health Management and Policy (4 cr.)

**Core KAM III: Principles of Organizational and Social Systems (14 cr.)**  
This KAM offers students a critical examination of major systems theories and theorists. Students analyze and compare different delivery, international, or philosophical systems pertaining to health services management and policy. This KAM also includes the design, implementation, and execution of an evaluation of a health services system.

**Breadth:** SBSF 8310  Theories of Organizational and Social Systems (5 cr.)  
**Depth:** HLTH 8323  Current Research in Organizational and Social Systems: Health Management and Policy (5 cr.)  
**Application:** HLTH 8333  Professional Practice and Organizational and Social Systems: Health Management and Policy (4 cr.)

**Specialized KAMs (42 cr.)**

**Specialized KAM V: Advanced Theory, Methods, and Practice in Health Services (14 cr.)**  
This KAM provides an examination of methods and techniques employed in case studies and applied change in health management and policy. Students analyze current and future social problems and issues in health services management and policy and corresponding change interventions and implications. This KAM also includes the design, execution, and evaluation of a case study demonstrating the process of planned change in a health services setting.

**Breadth:** HLTH 8513  Health Services in the Contemporary Context: Health Management and Policy (5 cr.)  
**Depth:** HLTH 8523  Current Concepts and Methods in Health Services: Health Management and Policy (5 cr.)  
**Application:** HLTH 8533  Integrative Professional Practice in Health Services: Health Management and Policy (4 cr.)

**Specialized KAM VI: Contemporary Issues and the Ethical Delivery of Health Services (14 cr.)**  
**Breadth:** HLTH 8613  Health Services Delivery and Ethical Implications: Health Management and Policy (5 cr.)  
**Depth:** HLTH 8623  Health Services Delivery and Ethical Decision-Making: Health Management and Policy (5 cr.)  
**Application:** HLTH 8633  Ethical Theories Applied in Health Services: Health Management and Policy (4 cr.)
Specialized Knowledge Area Module VII: Advanced Case Study in Health Services (14 cr.)

*Breadth:* HLTH 8713  Theories of Case Study Research and Applied Change in Health Services: Health Management and Policy (5 cr.)

*Depth:* HLTH 8723  Relating Change Theories to Practice in Health Services: Health Management and Policy (5 cr.)

*Application:* HLTH 8733  A Case Study of Applied Change in Health Services: Health Management and Policy (4 cr.)

**Dissertation (30 cr.)**

HLTH 9000  Dissertation (30 cr.)
School of Nursing

M.S. Program in Nursing

The M.S. program in Nursing prepares students to focus their practice on the identified health needs of society, become leaders in their field through scholarship, manage technology and information, and develop a lifelong commitment to learning.

The program has two tracks for registered nurses: one for those with a B.S.N. degree and one for those with an associate’s degree or nursing diploma.

Associate and diploma graduates complete 24 semester credits of foundational courses before starting the core courses: the foundational courses contain the essential content and learning activities to prepare students for the core courses. B.S.N. graduates enter the program at the core course level. All students complete the same core and specialized curriculum and the same capstone courses. The six core courses provide students with a graduate-level knowledge in areas of theory, research, diversity, legality/ethics, and health care systems. The specialization courses build on the core courses and offer students direction and guidance for influencing nursing practice in selected areas. The capstone courses provide students the opportunity to integrate knowledge from their previous courses into a practice setting and to evaluate the achievement of professional and organizational goals.

Specializations

- Education
- Leadership and Management

Degree Requirements

- Non-B.S.N. track: 65 semester credits; B.S.N. track: 41 semester credits
- Foundation course: NURS 6000 (1 sem. cr.)
- Professional Development Plan and Program of Study
- Core courses (18 sem. cr.)
- Specialized courses (16 sem. cr.)
- Capstone project and practicum (6 sem. cr.)
- Minimum 3.0 GPA

Foundational and Core Curricula

Foundation Course (1 sem. cr.)

NURS 6000  Success Strategies in the Master of Science Program in Nursing Online Environment (1 sem. cr.)
Non-B.S.N. Track: Foundational Courses (24 sem. cr.)

NURS 6005  Nursing Roles for Today and Tomorrow (4 sem. cr.)
NURS 6010  Advancing Nursing Through Inquiry and Research (4 sem. cr.)
NURS 6015  Information and Health Care Technologies Applied to Nursing Practice (4 sem. cr.)
NURS 6020  Healing Therapies in Nursing Practice (4 sem. cr.)
NURS 6025  Managing a Continuum of Care for Positive Patient Outcomes (4 sem. cr.)
NURS 6030  The Practice of Population-Based Care (4 sem. cr.)

Core Courses (18 sem. cr.)

NURS 6100  Understanding Health Care Systems (3 sem. cr.)
NURS 6110  The Nurse Leader: New Perspectives on the Profession (3 sem. cr.)
NURS 6120  Linking Theory to Nursing Practice (3 sem. cr.)
NURS 6130  Evidence-Based Practice Through Research (3 sem. cr.)
NURS 6140  Ethical and Legal Views of the Changing Health Care System (3 sem. cr.)
NURS 6150  Promoting and Preserving Health in a Diverse Society (3 sem. cr.)

Specialized Curriculum

Education Specialization

The Education specialization prepares nurses for faculty positions in all types of undergraduate nursing programs, as well as for educator roles in diverse practice settings. Graduates have the knowledge to develop, plan, implement, and evaluate educational programs for nursing students and other individuals/groups needing health-related education.

NURS 6300  Student-Centered Learning in Nursing Education (3 sem. cr.)
NURS 6310  Teaching Strategies for Nurse Educators (3 sem. cr.)
NURS 6320  Integrating Technology Into Nursing Education (3 sem. cr.)
NURS 6330  Curriculum Development, Assessment, and Evaluation (3 sem. cr.)
NURS 6340  The Nurse Educator: Roles, Responsibilities, and Relationships (4 sem. cr.)

Leadership and Management Specialization

The Leadership and Management specialization prepares nurses for leadership positions in complex health care systems. Collaboration and partnerships are key to managing change and meeting standards for nursing practice. Graduates are ready to make a difference in organizations by addressing pressing issues such as workforce development, resources, integration of technology, and the maintenance and improvement of quality care.

NURS 6200  The Nurse Administrator: Leading and Managing for Excellence (4 sem. cr.)
NURS 6210  Health Care Finance and Budgeting (4 sem. cr.)
NURS 6220  Human Resources Management (4 sem. cr.)
NURS 6230  Case Study: Quality Nursing in a Complex Health Care Organization (4 sem. cr.)
Capstone Courses (6 sem. cr.)

The completion of field and practicum experiences gives students the confidence to function at an advanced level in a selected practice setting.

NURS 6500  Synthesis Project (3 sem. cr.)
NURS 6510  Synthesis Practicum (3 sem. cr.)
School of Psychology

M.S. in Mental Health Counseling

The Master of Science in Mental Health Counseling program prepares students to identify and address the need for counseling for individuals, thereby effecting social change in communities. The curriculum, designed to meet nationally recommended counseling standards, maintains a commitment to excellence through the use of technology, experiential practice, and collaboration.

M.S. in Mental Health Counseling students will be able to
- recognize the role of the counseling profession in the value and advancement of individuals, communities, and organizations;
- employ the professional counseling code of ethics;
- demonstrate cross-cultural competencies and skills;
- contribute to the advancement of mental health care for all citizens;
- analyze their place in the hierarchy of both social power and multiculturalism in relation to their counseling ethics, identity, and delivery of services;
- develop an appropriate skill competence for an identified theoretical model;
- deliver contextually appropriate counseling and remediation skills and interventions;
- establish identity through participation in professional state, regional, and national organizations;
- understand the counselor’s role as client-advocate with families, agencies, and institutions;
- effect positive social change as community leaders; and
- collaborate with counseling faculty and other mental health professionals to present data and findings to the professional counseling community.

Degree Requirements

The M.S. in Mental Health Counseling consists of core coursework, a practicum, an internship, a residency, and the completion of a thesis. Core courses must be taken in the order presented. Additional courses may be taken at the end of the program of study to provide breadth and depth of learning.

- 95 quarter credits
- Core coursework (76 cr.)
- Thesis (10 cr.)
- Full-time enrollment (with the exception of non-credit enrollment options)
- Field experience: 100-hour practicum (3 cr.); 900-hour internship (6 cr.)
- 12 days of academic residency (two 6-day residencies)
- Minimum 3.0 GPA
Curriculum

Core Courses (76 cr.)

COUN 6000  Foundations for Graduate Study in Mental Health Counseling (6 cr.)
COUN 6705  Professional Identity and Ethics in Counseling (5 cr.)
COUN 8722  Counseling and Psychotherapy Theories (5 cr.)
COUN 6215  Lifespan Development (5 cr.)
COUN 6331  Interviewing and Observational Strategies (5 cr.)
PSYC 6305  Statistics 1 (5 cr.)
COUN 8723  Multicultural Counseling (5 cr.)
PSYC 6315  Tests and Measurement (5 cr.)
COUN 6205  History and Systems of Counseling and Psychology (5 cr.)
COUN 8720  Diagnosis and Assessment (5 cr.)
COUN 8753  Vocational Psychology and Counseling (5 cr.)
COUN 8785  Prevention: Research and Practice (5 cr.)
COUN 6250  Group Process and Dynamics (5 cr.)
PSYC 6310  Research Design (5 cr.)

PSYC 8726  Marriage and Family Therapy (5 cr.)
or
PSYC 8728  Substance Abuse Therapies (5 cr.)

Thesis and Field Experience (19 cr.)

COUN 6390  Thesis (10 cr — 5 cr. per term for 2 terms)
COUN 6671  Counseling Practicum (3 cr.)
COUN 6682  Counseling Internship (6 cr. — 3 cr. per term for 2 terms)

Note on licensure: The M.S. in Mental Health Counseling program is designed to prepare graduates to qualify to sit for licensing exams and to meet the academic licensure requirements of most state boards. The program is not accredited by the Council for Accreditation of Counseling and Related Educational Programs or the American Psychological Association, which may be a requirement for licensure in some states. Because no graduate program can guarantee licensure upon graduation, we encourage students to consult the appropriate agency to determine specific requirements.

For more information about licensure, students should visit the National Board for Certified Counselors at www.nbcc.org/stateboardmap and contact the appropriate licensing body. International students are encouraged to identify and contact their appropriate licensing body.
M.S. in Psychology

The M.S. in Psychology provides students with pre-doctoral training—a background in the development and application of psychological theories, basic scientific methods, and principles of psychological science. The General Program prepares students to apply theories to practice and to conceptualize social science research. The Industrial/Organizational specialization prepares students to work in organizations, corporations, and human resource and personnel departments.

M.S. in Psychology students will be able to
- apply psychological knowledge and research in real-life situations, such as in educational, organizational, social, and mental health settings;
- develop research and statistical skills required to conduct and analyze psychological research;
- demonstrate critical thinking through analysis and evaluation of psychological theories and research; and
- conduct basic and applied research.

Specializations
- General Program
- Industrial/Organizational

Degree Requirements
- 61 quarter credits
- Professional Development Plan with Program of Study (included in PSYC 6000)
- Core courses (51 cr.)
- Thesis (10 cr.)
- Minimum 3.0 GPA

Curriculum
The M.S. in Psychology program consists of core courses and the completion of a thesis. Courses must be taken in the order presented. Additional courses may be taken at the end of the program of study to provide breadth and depth of learning.

General Program

Core Courses (51 cr.)
PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)
PSYC 6210 Advanced General Psychology (5 cr.)
PSYC 6300 Critical Thinking and Writing in Psychology (5 Cr.)
PSYC 6305 Statistics 1 (5 cr.)
PSYC 6310 Research Design (5 cr.)
PSYC 6235  Cognitive Psychology (5 cr.)
PSYC 6315  Tests and Measurement (5 cr.)
PSYC 6245  Social Psychology (5 cr.)
PSYC 6701  Culture and Psychology (5 Cr.)

**Thesis (10 cr.)**
PSYC 6390  Thesis (10 cr. — 5 cr. per term for 2 terms)

**Industrial/Organizational Specialization**

**Core Courses (51 cr.)**

PSYC 6000  Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205  History and Systems of Counseling and Psychology (5 cr.)
PSYC 6210  Advanced General Psychology (5 cr.)
PSYC 6300  Critical Thinking and Writing in Psychology (5 Cr.)
PSYC 6305  Statistics 1 (5 cr.)
PSYC 6310  Research Design (5 cr.)
PSYC 8750  Foundations of I/O Psychology (5 cr.)
PSYC 6315  Tests and Measurement (5 cr.)
PSYC 8756  International/Cross-Cultural Issues in Organizations (5 cr.)
PSYC 8754  Personnel Psychology in the Workplace (5 cr.)

**Thesis (10 cr.)**
PSYC 6390  Thesis (10 cr. — 5 cr. per term for 2 terms)

**Master’s to Ph.D. Matriculation**

Students enrolled in Walden University’s M.S. in Psychology program are required to complete all degree requirements for that program (including the thesis) and must be accepted into one of Walden’s Ph.D. in Psychology specializations before taking any other courses that will count toward the doctoral degree. Students who complete Walden’s M.S. in Psychology degree and then matriculate into Walden’s Ph.D. in Psychology program will not have to repeat any courses required for the Ph.D. program that were completed (with a B or better) during the M.S. in Psychology program. Students must meet the minimum admission requirements for the Ph.D. program, as specified in the current catalog.

**Ph.D. in Psychology**

The university’s mission includes broad access to high-quality postsecondary education through a distance-learning environment and preparation of its graduates to achieve professional excellence and to effect positive social change. Consistent with this mission, the Ph.D. in Psychology program is designed to prepare scholar-practitioners to meet real-world challenges and facilitate positive change in individuals, groups, organizations, and local, national, and global communities. Specifically, the program prepares lifelong learners to integrate psychological theory, research, established methods of scientific inquiry, and evidence-based practices that incorporate cultural and individual diversity. The School of Psychology training model encompasses an integrated, developmental, and sequential plan of study that includes Web-based and face-to-face coursework; residencies that provide opportunities for knowledge and skill
acquisition, ethical practice, and professional socialization; field training; and demonstration of research competency.

Specializations

- Clinical Psychology—Licensure
- Counseling Psychology—Licensure
- General Psychology (formerly Academic Psychology)
  - Educational Psychology
  - Research and Evaluation
- Health Psychology
- Organizational Psychology
- School Psychology—Licensure

Degree Requirements

- 133–185 quarter credits, depending on the specialization*
- Foundation activities
- Professional Development Plan with Program of Study and, for students in licensure specializations, a Personal State Licensure Plan (included in PSYC 6000)
- Proposal, dissertation, and oral presentation
- Field experience — required for Clinical, Counseling, Health, and School specializations
- Residency:
  - Licensure specializations: 500-hour Academic Year in Residence
  - Other specializations: 20 days of academic residency (two 4-day and two 6-day residencies)
- Minimum 3.0 GPA

*Note: For students admitted to a doctoral specialization with a bachelor’s degree and no master’s degree, a thesis is required and will add 10 credits to the total number of credits described for each specialization.

Curriculum

The curriculum for each specialization of the Ph.D. in Psychology is composed of core and elective courses, research competency, and the dissertation. Core courses appear, for each specialization, in the order of recommended sequence. Licensure specialization students also complete practicum and internship field experiences.

Clinical Psychology Specialization—Licensure (156 cr.)

The Clinical Psychology specialization prepares individuals to practice as licensed psychologists with a commitment to social change in health care settings, community mental health centers, group practice settings, inpatient psychiatric settings, and private practice. Clinical psychologists promote psychological well-being, engage in prevention and early intervention of psychological difficulties, and provide treatment to clients experiencing severe psychopathology.
Clinical Psychology students will be prepared to
• work with clients presenting with various levels of problems, including those with severe emotional distress or psychopathology;
• use the scholar-practitioner model, to apply theoretical and empirical models to assessment and interventions;
• work with culturally diverse populations;
• provide rural mental health services;
• collaborate with psychiatry and other health care providers;
• function as managers and supervisors in mental health care systems; and
• contribute to social change through original research, treatment outcome research, and program evaluation.

The Clinical Psychology specialization consists of 21 core courses, one elective course, demonstration of research competency, field experiences (Practicum and Internship), and dissertation. Additional courses may be taken to provide breadth and depth of learning. Note: Students entering the program without an evidence-based or empirical master’s thesis (or equivalent) must demonstrate research competency by means of successfully completing PSYC 6395.

Core Courses (106 cr.)
PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)
PSYC 6215 Lifespan Development (5 cr.)
PSYC 6220 Psychology of Personality (5 cr.)
PSYC 6225 Biopsychology (5 cr.)

PSYC 6230 Psychology of Learning and Memory (5 cr.)

or
PSYC 6235 Cognitive Psychology (5 cr.)

PSYC 6245 Social Psychology (5 cr.)
PSYC 6305 Statistics 1 (5 cr.)
PSYC 6315 Tests and Measurement (5 cr.)
PSYC 6331 Interviewing and Observational Strategies (5 cr.)
PSYC 6341 Psychological Assessment: Cognitive (5 cr.)
PSYC 6351 Psychological Assessment: Personality and Social-Emotional (5 cr.)
PSYC 6310 Research Design (5 cr.)
PSYC 8305 Statistics 2 (5 cr.)
PSYC 8361 Advanced Psychological Testing (5 cr.)
PSYC 8700 Psychology and Social Change (5 cr.)
PSYC 8705 Ethics and Standards of Professional Practice (5 cr.)
PSYC 8721 Advanced Psychopathology (5 cr.)
PSYC 8722 Counseling and Psychotherapy Theories (5 cr.)
PSYC 8723 Multicultural Counseling (5 cr.)
PSYC 8741 Psychopharmacology (5 cr.)

Elective Course (5 cr.)
One elective course, selected from the graduate courses in the School of Psychology, may be added anywhere in the student’s program, provided prerequisites are met.
Dissertation and Field Experience (45 cr.)

PSYC 9000  Dissertation (27 cr.)
PSYC 8871  Practicum (6 cr. — 3 cr. per term for 2 terms)
PSYC 8882  Internship (12 cr. — 3 cr. per term for 4 terms)

Note on licensure: The Clinical Psychology specialization is designed to prepare graduates to qualify to sit for psychology licensing exams and to meet the academic licensure requirements of most licensing boards. This program is not accredited by the American Psychological Association, which may be a requirement for licensure in some states. Because no graduate psychology program can guarantee licensure upon graduation, we encourage students to consult the appropriate agency to determine specific requirements. For more information about licensure, students should visit the Association of State and Provincial Psychology Boards at www.asppb.org/about/boardContact.aspx and contact the appropriate licensing body. International students are encouraged to identify and contact their appropriate licensing body.

Counseling Psychology Specialization—Licensure (156 cr.)

The Counseling Psychology specialization endorses the scientist-practitioner model of training and can prepare students for a variety of professional roles: in clinical practice, academia, or research. The program prepares students to practice as licensed psychologists who work with clients to promote functional relationships, healthy lifestyles, and positive career choices and roles. Counseling psychologists facilitate growth and development by building on client strengths, and work with clients of all ages in various therapeutic settings.

Counseling Psychology students will be able to
- implement the scholar-practitioner model in assessment and treatment of clients from diverse populations;
- conceptualize counseling issues and problems based on counseling theory and research;
- use evidence-based assessment and intervention techniques; and
- contribute to the field through original research, process and outcome research, and treatment evaluation.

The Counseling Psychology specialization consists of 21 core courses, one elective course, demonstration of research competency, field experiences (Practicum and Internship), and dissertation. Additional courses may be taken to provide breadth and depth of learning.

Core Courses (106 cr.)

PSYC 6000  Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205  History and Systems of Counseling and Psychology (5 cr.)
PSYC 6215  Lifespan Development (5 cr.)
PSYC 6220  Psychology of Personality (5 cr.)
PSYC 6225  Biopsychology (5 cr.)
PSYC 6305  Statistics 1 (5 cr.)
PSYC 6331  Interviewing and Observational Strategies (5 cr.)
PSYC 6341  Psychological Assessment: Cognitive (5 cr.)
PSYC 6351  Psychological Assessment: Personality and Social-Emotional (5 cr.)
PSYC 6310  Research Design (5 cr.)
PSYC 6315  Tests and Measurement (5 cr.)
PSYC 6230  Psychology of Learning and Memory (5 cr.)  
or  
PSYC 6235  Cognitive Psychology (5 cr.)

PSYC 6245  Social Psychology (5 cr.)  
PSYC 8305  Statistics 2 (5 cr.)  
PSYC 8700  Psychology and Social Change (5 cr.)  
PSYC 8705  Ethics and Standards of Professional Practice (5 cr.)  
PSYC 8720  Diagnosis and Assessment (5 cr.)  
PSYC 8722  Counseling and Psychotherapy Theories (5 cr.)  
PSYC 8723  Multicultural Counseling (5 cr.)  
PSYC 8725  Group Therapy (5 cr.)  
PSYC 8361  Advanced Psychological Testing (5 cr.)

**Elective Course (5 cr.)**

One elective course, selected from the graduate courses in the School of Psychology, may be added anywhere in the student’s program, provided prerequisites are met.

**Dissertation and Field Experience (45 cr.)**

PSYC 9000  Dissertation (27 cr.)  
PSYC 8871  Practicum (6 cr. — 3 cr. per term for 2 terms)  
PSYC 8882  Internship (12 cr. — 3 cr. per term for 4 terms)

**Note on licensure:** The Counseling Psychology specialization is designed to prepare graduates to qualify to sit for psychology licensing exams and to meet the academic licensure requirements of most licensing boards. This program is not accredited by the American Psychological Association, which may be a requirement for licensure in some states. Because no graduate psychology program can guarantee licensure upon graduation, we encourage students to consult the appropriate agency to determine specific requirements. For more information about licensure, students should visit the Association of State and Provincial Psychology Boards at www.asppb.org/about/boardContact.aspx and contact the appropriate licensing body. International students are encouraged to identify and contact their appropriate licensing body.

**General Psychology Specialization (133 cr.)**

The General Psychology specialization—with tracks in Educational Psychology and in Research and Evaluation—prepares individuals to teach, mentor, and/or conduct culturally and contextually relevant research in psychology in institutions of higher education and to engage their knowledge and skills in applied settings.

**Educational Psychology Track**

The Educational Psychology track prepares students to integrate psychological theory and practice, using scientific methods and evidence-based practice to inform undergraduate and graduate instruction that incorporates issues of cultural and individual diversity.

Students in the Educational Psychology track will

- acquire a broad knowledge base in psychology and its history, ethics, research methods, and applications;
- use psychological theory, research, and practice to inform instructional process and content;
apply psychological theories and research to educational practice;
• develop the ability to promote attitudes and skills for lifelong learning, critical inquiry, and problem-solving in graduate and undergraduate learners; and
• develop the research skills necessary to make scholarly contributions to the field of psychology.

The Educational Psychology track consists of 16 core courses, five elective courses, demonstration of research competency, and dissertation. Additional courses may be taken to provide breadth and depth of learning.

Core Courses (81 cr.)
PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)
PSYC 6215 Lifespan Development (5 cr.)
PSYC 6225 Biopsychology (5 cr.)
PSYC 6235 Cognitive Psychology (5 cr.)
PSYC 6245 Social Psychology (5 cr.)
PSYC 6305 Statistics 1 (5 cr.)
PSYC 6310 Research Design (5 cr.)
PSYC 6315 Tests and Measurement (5 cr.)
PSYC 8305 Statistics 2 (5 cr.)
PSYC 8700 Psychology and Social Change (5 cr.)
PSYC 8705 Ethics and Standards of Professional Practice (5 cr.)
PSYC 8760 Educational Psychology (5 cr.)
PSYC 8762 Teaching of Psychology (5 cr.)
PSYC 8763 Principles of Instructional Design (5 cr.)
PSYC 8764 Instructional Design for Online Course Development (5 cr.)

Elective Courses (25 cr.)
Five elective courses, selected from the graduate courses in the School of Psychology may be added anywhere in the student’s program, provided prerequisites are met.

Dissertation (27 cr.)
PSYC 9000 Dissertation (27 cr.)

Research and Evaluation Track
The Research and Evaluation track prepares students to integrate psychological theory and practice, using scientific methods and evidence-based practice to apply their knowledge and skills about research and evaluation in a variety of settings.

Students in the Research and Evaluation track will
• acquire a broad knowledge base in psychology and its history, ethics, research methods, and applications;
• develop the research skills necessary to make culturally and contextually relevant scholarly contributions to the field of psychology;
• analyze and evaluate the theories and applications underlying multiple data collection techniques used in psychology;
• use psychological theory and research to inform practice in a variety of public, private, governmental, and nongovernmental settings;
• use research and evaluation strategies to study the efficacy, integrity, acceptability, transferability, and contextual and cultural relevance of programs and interventions;
conceptualize, design, analyze, and evaluate a wide variety of research approaches and methodologies;
• develop, implement, and evaluate programs and strategies;
• collaborate with professionals in the development and application of research;
• use research and evaluation strategies to examine social change from the psychological perspective of individuals, groups, organizations, and local and global communities; and
• serve as consultants in research, data analysis, and evaluation in a range of settings (e.g., higher education, government, public sector).

The Research and Evaluation track consists of 15 core courses, six elective courses, demonstration of research competency, and dissertation. Additional courses may be taken to provide breadth and depth of learning.

**Core Courses (76 cr.)**

- PSYC 6000  Foundations for Graduate Study in Psychology (6 cr.)
- PSYC 6205  History and Systems of Counseling and Psychology (5 cr.)
- PSYC 6215  Lifespan Development (5 cr.)
- PSYC 6225  Biopsychology (5 cr.)
- PSYC 6235  Cognitive Psychology (5 cr.)
- PSYC 6245  Social Psychology (5 cr.)
- PSYC 6305  Statistics 1 (5 cr.)
- PSYC 6310  Research Design (5 cr.)
- PSYC 6315  Tests and Measurement (5 cr.)
- PSYC 8300  Philosophical Foundations in Psychological Research (5 cr.)
- PSYC 8305  Statistics 2 (5 cr.)
- PSYC 8306  Statistics 3 (5 cr.)
- PSYC 8310  Qualitative Analysis (5 cr.)
- PSYC 8700  Psychology and Social Change (5 cr.)
- PSYC 8705  Ethics and Standards of Professional Practice (5 cr.)

**Elective Courses (30 cr.)**

Six elective courses selected from the graduate courses in the School of Psychology may be added anywhere in the student’s program, provided prerequisites are met.

**Dissertation (27 cr.)**

- PSYC 9000  Dissertation (27 cr.)

**Health Psychology Specialization (133 cr.)**

The Health Psychology specialization educates students on the complex relationship among psychological, social, and biological factors implicated in health and illness. This research-focused program prepares students to work in a variety of settings, such as health and wellness centers, corporations, research institutions, and academic institutions in research, teaching, psychoeducational, and administrative positions.

Health Psychology students will be able to
- articulate and apply theoretical models of psychophysiological wellness, health, and immunocompetence;
- identify and moderate personal and environmental factors that impact health;
• understand and apply evidence-based psychological interventions that emphasize the role of stress on health;
• describe psychotropic medications and their use in the treatment of mental and behavioral disorders;
• articulate alternatives to pharmacological treatment that are less invasive and less disruptive to the body, and have an evidence base of effectiveness;
• describe current concepts, theories, and research about neuropsychology, neuroanatomy, neuropathology, and psychoneuroimmunology (PNI);
• recommend evidence-based mind/body interventions to help patients establish symptom management or attenuate physical illnesses;
• articulate the impact of nutrition on psychological dysfunction;
• use nutritional models to promote psychological wellness and mitigate illness;
• use behavioral nutrition as an approach to psychological and psychophysiological illness and abnormal behavior;
• understand current ethical standards and legal responsibilities of health psychologists, including those pertaining to psychological practice and research; and
• interact with medical professionals in practice and research on a peer-relationship level.

The Health Psychology specialization consists of 18 core courses, two elective courses, demonstration of research competency, dissertation, and a field experience.

Core Courses (91 cr.)
PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)
PSYC 6215 Lifespan Development (5 cr.)
PSYC 6225 Biopsychology (5 cr.)
PSYC 6230 Psychology of Learning and Memory (5 cr.)
PSYC 6245 Social Psychology (5 cr.)
PSYC 6305 Statistics 1 (5 cr.)
PSYC 6310 Research Design (5 cr.)
PSYC 6315 Tests and Measurement (5 cr.)
PSYC 8305 Statistics 2 (5 cr.)
PSYC 8700 Psychology and Social Change (5 cr.)
PSYC 8705 Ethics and Standards of Professional Practice (5 cr.)
PSYC 8741 Psychopharmacology (5 cr.)
PSYC 8745 Health Psychology (5 cr.)
PSYC 8746 Behavioral Nutrition (5 cr.)
PSYC 8747 Psychoneuroimmunology (5 cr.)
PSYC 8710 Clinical Neuropsychology (5 cr.)
PSYC 8748 Stress and Coping (5 cr.)

Elective Courses (10 cr.)
Two elective courses selected from the graduate courses in the School of Psychology may be added anywhere in the student’s program, provided prerequisites are met.

Dissertation and Field Experience (32 cr.)
PSYC 9000 Dissertation (27 cr.)
PSYC 8861 Field Experience in Health Psychology (5 cr.)
Organizational Psychology Specialization (133 cr.)

The Organizational Psychology specialization prepares students to work within industry, government, and university settings as practitioners, consultants, and researchers. Specifically, this specialization focuses on issues related to organizational behavior, leadership, and development; personnel staffing, development, and well-being; and effective, ethical consultation and research practices. Students may select one of three tracks offered in this specialization—Industrial, Organizational, or Consultation.

Organizational Psychology students will

- acquire a broad knowledge base in psychology and its history, research methods, and applications;
- acquire the background needed to develop consultative relationships with industry, government, military, and other organizations;
- develop the skills to conduct organizational research in profit, nonprofit, government, and other settings;
- develop the requisite knowledge and experience to teach organizational psychology at the university level;
- acquire an understanding of ethical concerns in the field and the ability to employ ethical and accepted standards of practice; and
- achieve a perspective on the integral nature of cultural diversity in organizations and the ability to effectively incorporate it.

The Organizational Psychology specialization consists of 15 core courses, two track courses, four elective courses, demonstration of research competency, and the dissertation sequence. *Note: Students entering the program without an evidence-based or empirical master’s thesis (or equivalent) must demonstrate research competency by means of successfully completing PSYC 6395.*

**Core Courses (76 cr.)**

- PSYC 6000  Foundations for Graduate Study in Psychology (6 cr.)
- PSYC 6205  History and Systems of Counseling and Psychology (5 cr.)
- PSYC 6215  Lifespan Development (5 cr.)
- PSYC 6225  Biopsychology (5 cr.)
- PSYC 6230  Psychology of Learning and Memory (5 cr.)
- PSYC 6235  Cognitive Psychology (5 cr.)
- PSYC 6245  Social Psychology (5 cr.)
- PSYC 6305  Statistics 1 (5 cr.)
- PSYC 6310  Research Design (5 cr.)
- PSYC 6315  Tests and Measurement (5 cr.)
- PSYC 8305  Statistics 2 (5 cr.)
- PSYC 8700  Psychology and Social Change (5 cr.)
- PSYC 8705  Ethics and Standards of Professional Practice (5 cr.)
- PSYC 8750  Foundations of Industrial/Organizational Psychology (5 cr.)
- PSYC 8756  International/Cross-Cultural Issues in Organizations (5 cr.)

**Track Courses (10 cr.)**

Students complete both courses for one track.

*Industrial Track*

- PSYC 8753  Vocational Psychology and Counseling (5 cr.)
- PSYC 8754  Personnel Psychology in the Workplace (5 cr.)
Organizational Track
PSYC 8752 Psychology of Organizational Behavior (5 cr.)
PSYC 8755 Leadership and the Process of Change (5 cr.)

Consultation Track
PSYC 8784 Psychological Consultation (5 cr.)
PSYC 8820 Successful Practice Management (5 cr.)

Elective Courses (20 cr.)
Four elective courses selected from the graduate courses in the schools of psychology and management may be added anywhere in the student’s program, provided prerequisites are met.

Dissertation (27 cr.)
PSYC 9000 Dissertation (27 cr.)

School Psychology Specialization—Licensure (175 cr.)
The School Psychology specialization helps students develop the knowledge, attitudes, and skills necessary to provide quality and contextually relevant educational and mental health services to children (birth–21 years) and their families. School psychologists practice in school settings and private practice, teach at the university level, and conduct applied research. This specialization provides training in both psychology and education and emphasizes preparation in mental health, child development, school organization, learning, behavior, and motivation. With skills and knowledge of school systems, effective teaching, and successful learning, students are prepared to use their training and skills to team with educators, parents, and other mental health professionals to ensure that every child learns in a safe, healthy, and supportive environment.

School Psychology students will
- apply consultation models and methods to collaborate on planning and decision-making processes at the individual, group, and system levels;
- assess learning processes and develop cognitive and academic goals for students with different abilities, disabilities, strengths, and needs;
- assess developmental processes and develop appropriate behavioral, affective, adaptive, and social goals for students of varying abilities, disabilities, strengths, and needs;
- work with individuals of diverse characteristics to implement strategies selected and/or adapted based on individual characteristics, strengths, and needs;
- consider influences of biological, social, cultural, ethnic, experiential, socioeconomic, gender-related, and linguistic factors in development and learning;
- use various models and methods as part of a systematic data collection, translate assessment results into evidenced-based decisions, and evaluate decisions;
- design, implement, and evaluate evidence-based prevention and intervention programs;
- collaborate with individuals, families, and groups to facilitate policies and practices that create and maintain safe, supportive, and effective learning and comprehensive mental health environments for children and others; and
- use research, statistics, and evaluation methods to promote social change through original research.

The School Psychology specialization consists of 26 core courses, demonstration of research competency, field experiences (Practicum and Internship), and dissertation. Additional courses may be taken to provide breadth and depth of learning.
Core Courses (130 cr.)

PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)
PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)
PSYC 6215 Lifespan Development (5 cr.)
PSYC 6220 Psychology of Personality (5 cr.)
PSYC 6225 Biopsychology (5 cr.)
PSYC 6230 Psychology of Learning and Memory (5 cr.)

or

PSYC 6235 Cognitive Psychology (5 cr.)

PSYC 6245 Social Psychology (5 cr.)
PSYC 6305 Statistics 1 (5 cr.)
PSYC 6310 Research Design (5 cr.)
PSYC 6331 Interviewing and Observational Strategies (5 cr.)
PSYC 6341 Psychological Assessment: Cognitive (5 cr.)
PSYC 6351 Psychological Assessment: Personality and Social-Emotional (5 cr.)
PSYC 6315 Tests and Measurement (5 cr.)
EDUC 6641 Foundations of Reading and Literacy Development (5 cr.)
PSYC 8305 Statistics 2 (5 cr.)
PSYC 8361 Advanced Psychological Testing (5 cr.)
PSYC 8700 Psychology and Social Change (5 cr.)
PSYC 8705 Ethics and Standards of Professional Practice (5 cr.)
PSYC 8718 Psychology of the Exceptional Individual (5 cr.)
PSYC 8719 Developmental Psychopathology (5 cr.)
PSYC 8722 Counseling and Psychotherapy Theories (5 cr.)
PSYC 8723 Multicultural Counseling (5 cr.)
PSYC 8780 Seminar in School Psychology (5 cr.)
PSYC 8784 Psychological Consultation (5 cr.)
PSYC 8785 Prevention: Research and Practice (5 cr.)
EDUC 8807 Curriculum Theory and Design (4 cr.)

Dissertation and Field Experience (45 cr.)

PSYC 9000 Dissertation (27 cr.)
PSYC 8871 Practicum (6 cr. — 3 cr. per term for 2 terms)
PSYC 8882 Internship (12 cr. — 3 cr. per term for 4 terms)

Note on licensure: The School Psychology specialization is designed to prepare graduates to qualify to sit for psychology licensing exams and to meet the academic licensure requirements of most licensing boards. This program is not accredited by the American Psychological Association, which may be a requirement for licensure in some states. Because no graduate psychology program can guarantee licensure upon graduation, we encourage students to consult the appropriate agency to determine specific requirements. For more information about licensure, students should visit the Association of State and Provincial Psychology Boards at www.asppb.org/about/boardContact.aspx and contact the appropriate licensing body. International students are encouraged to identify and contact their appropriate licensing body.
Residency for Licensure Students

Students acquire a number of critical skills required for professional practice during their program of study. Academic residencies provide opportunities for face-to-face interactions that promote scholarship, socialization into the profession, skill building within a university community, and cohesion between students and faculty members. These opportunities are focused during the Academic Year in Residence (AYR) that occurs during a consecutive 13-month period (typically starting between the second and third years of the program).

Residency Components

Several important facets of the student experience are described below. These experiences, all of which also occur in the face-to-face residency setting, are an integral part of student learning at Walden. These include skills development, peer interactions, exposure to and socialization into the profession, college and university engagement, and involvement in academic advising and support services. Emphasis on these components is focused during residencies.

Skills Development

The development of critical skills is a key component of the residency experience. All students attend a Milestone 1 residency within the first six months of matriculation and are required to participate in an Introduction to Counseling Skills intensive. This provides students with an opportunity to demonstrate and receive feedback on basic interaction skills. During the Academic Year in Residence, most students participate in basic and advanced assessment courses that have face-to-face components. Additionally, a number of intensive seminars are offered that provide training on clinical skills in a variety of areas, research skills that lead to the development of the dissertation prospectus, and competencies required for field training experiences.

Peer Interactions

Psychology students have many opportunities to engage in interactions with peers, both virtually and in face-to-face settings. Given the dispersed nature of our university community, the Web-based classroom provides students the opportunity to engage in scholarly discourse with other students from all over the world, facilitating understanding of the issues, practices, and scholarship of psychology from national and international perspectives. The virtual classrooms provide opportunities for small group projects; engagement in formal, scholarly interaction; and/or involvement in informal discussions. During residency components, students are afforded the opportunity to gather in both social and learning community settings. They join each other for meals, share resources, and participate in special topic seminars, university-wide plenary sessions, and small group discussions. Students are able to communicate regularly through listservs and other virtual community-building mechanisms established for faculty and students within a given specialization.

Exposure to and Socialization Into the Profession of Psychology

Psychology students attending residencies are afforded the opportunity to hear speakers from a broad array of disciplines at university plenary sessions, intensive seminars, colloquia, and social events sponsored by the school or by the specialization directors. Additionally, there are opportunities to hear their colleagues present and discuss their research ideas in formal and informal settings. Whenever and wherever our students and faculty convene in face-to-face settings, small groups gather to share meals and engage in social and professional discourse. There are also opportunities to prepare research presentations at college-wide conferences that occur at each 12-day residency, which include both poster and paper
venues. Residency experiences can also include attending professional conferences that provide additional opportunities for professional socialization.

**College and University Engagement**

Students have a number of opportunities for engagement in college and university service. These include participation in search committees, periodic curriculum reviews, and working groups and tasks forces for which student input is vital. At residencies, students and faculty frequently brainstorm together and provide input on issues affecting the college. Students have the opportunity to participate as graduate assistants who benefit the college and university in a number of ways, including providing research and other types of professional support and serving as teaching assistants.

**Academic Advising and Support Services**

Walden University learners are supported throughout their programs by a number of systems and services. Students are supported by professional academic advisors and specialization directors who provide professional mentoring (including dissertation supervision). Qualified faculty members supervise students during their practicum and internship experiences. The Office of Student Development offers a number of services that enhance student learning, including Web-based information resources for developing writing skills, writing tutors, and guidance on professional writing. The Research Office assists students in seeking grants and fellowships. Residencies offer opportunities for students to acquire these services in a face-to-face environment. Seminars in APA style, literature review methods, and basic writing skills refreshers are common, as are required advising sessions with faculty members and academic advisors.

**Residency Requirements**

All students are required to complete one Milestone 1 residency within the first 6 months of matriculation and to successfully complete the Introduction to Counseling Skills intensive seminar. In addition, licensure students must complete a number of activities during the Academic Year in Residence. Activities include, but are not limited to, the following: (a) assessment knowledge and skills acquisition (satisfied by completing the basic and advanced assessment courses), (b) conference attendance, (c) research development and presentation, and (d) preparation for field training. Students must complete the minimum activities and accrue at least 500 hours of residency experiences during a consecutive 13-month period to graduate; they must be enrolled full time during this period.

Students should contact academic advising to determine the specific AYR requirements. Students are also responsible for contacting their state licensing boards and for understanding the state-specific requirements for residency.

**Psychological Assessment Coursework**

The purpose of the psychological assessment coursework is to provide a framework for doctoral students in the licensure specializations (Clinical, Counseling, School) to develop their assessment knowledge and skills repertoire. Based on a developmental progression, students gain the following:

- An understanding of the assessment process and related legal, ethical, and diversity issues.
- An understanding of principles of tests and measurement.
- A set of basic skills in the administration, scoring, and interpretation of assessment measures across domains.
- The ability to write an interpretive summary of assessment data.
At the advanced level, doctoral students further develop their psychological assessment repertoire in the areas of testing, interpretation, data-based diagnoses and recommendations for intervention, and data-based psychological report writing.

*Basic-level courses include the following:*
PSYC 6315  Tests and Measurement
PSYC 6341  Psychological Assessment: Cognitive
PSYC 6351  Psychological Assessment: Personality and Social-Emotional

*Advanced-level courses include the following:*
PSYC 8361  Advanced Psychological Testing

See [Course Descriptions](www.WaldenU.edu/c/Student_Catalog/10479_10546.htm) for more information on each course and prerequisites.

Basic-level testing coursework may be waived (a) with equivalent coursework, with a grade of *B* or better, taken within 3 years of admission, or (b) with current supervised professional practice in psychological assessment and prior coursework with a grade of *B* or better in cognitive and personality/social-emotional assessment. Students who are working as school psychologists or employed in positions that have psychological assessment as a major component and are considering the second waiver option must submit supporting documentation to the coordinator of skill development on an individual basis. Supporting documentation must contain at a minimum the following:

- Copies of transcripts documenting comparable assessment coursework.
- Samples of current comprehensive psychological evaluations with all identifiable information removed.
- Letter from supervisor documenting current level of assessment skills and verification of employment.

Please note that this option is not available to individuals with only “on-the-job” assessment experience and no supporting coursework.

## Change of Specialization

Occasionally, students decide to change programs or specializations within the School of Psychology. When this situation occurs, students should notify their academic advisor of their intent to change programs/specializations. If after speaking with the advisor, students elect to change, they submit an online petition to their advisor requesting the change. Students must submit a *Change of Specialization* form, as well as a new *Program of Study* and Professional Development Plan.

For **M.S. in Psychology students** switching between the General Program and the Industrial/Organizational specialization, the academic advising team approves the change request and sends the approval to the registrar’s office.

For **Ph.D. students and M.S. in Mental Health Counseling students**, the academic advisor sends the following to the program/specialization director for the new specialization, for review and approval:

- Student’s request.
- *Change of Specialization* form.
- *Program of Study* form.
- Professional Development Plan.
• Student’s current Walden GPA.

If the program/specialization director does not approve the request, then the materials are sent to the assistant dean for student success for a final decision. The assistant dean for student success processes the request within 5 working days.

Once the request is approved, the advisor emails the registrar to process the change and copies the admissions office. Admissions reviews the change’s impact on the student’s transfer of credit before the student officially requests to switch programs. Upon completion of the review, which should occur within 10 working days, the admissions office informs the student via email of the new credit-transfer evaluation.

Field Experiences

Walden University uses the scholar-practitioner training model to help students integrate skills, knowledge, and research into practice. The purpose of field experience is to provide a comprehensive programmed sequence of training experiences designed to develop students’ skills, provide them experience with specific populations, and/or to provide them the experience of a fully functioning psychologist.

Types of Field Experiences

Field Experience in Health Psychology

The field experience in Health Psychology is designed to give graduate students experience within the field. Once all coursework has been completed, students select a location to fulfill their field experience. The field experience must incorporate duties relevant to the field: these may include (but are not limited to) teaching, conducting research, providing psycho-educational seminars, and assisting a health psychologist with health behavior modification. Clinical and/or counseling activities are not permitted. The field experience must involve 120 contact hours and be coordinated by the student and a local professional that is selected to supervise the experience.

Students enroll in PSYC 8861 during the term that the field experience is being completed. Prior to beginning the field experience, the student must complete the Application to Health Psychology Field Experience form, which must be approved by the director of Health Psychology. Prerequisites for the field experience include PSYC 6305 Statistics 1, PSYC 6310 Research Design, and PSYC 8745 Health Psychology. Applications are due the first day of the month of the term preceding the intended start of the field experience (e.g., a student intending to start the field experience in September must have the application completed by June 1). Students should contact their academic advisors for more information on the application process.

Field Experience in Mental Health Counseling

The M.S. in Mental Health Counseling supervised field experiences (practicum and internship) provide students an opportunity to develop and enhance their understanding of counseling theories, clinical skills, and competencies, as well as best practices in the mental health counseling profession. Students engage in experiential learning opportunities that include individual and group counseling as well as participation in
counseling-related activities such as supervision, consultation, guidance, and professional development. This clinical experience prepares students as entry-level mental health counseling professionals. For more information, see Mental Health Counseling Practicum (www.WaldenU.edu/c/Student_Catalog/10479_10577.htm), Mental Health Counseling Internship (www.WaldenU.edu/c/Student_Catalog/10479_10575.htm).

Field Experience in Licensure Specializations

Licensure students participate in intense, focused practice experiences (practicum) and an intense, broad-responsibilities experience (internship) where classroom education, skill building, and research skills are brought to the field of practice. Students identify field sites that can offer them growth in an upward direction, enhancing their professional skills, knowledge, and attributes. The students establish relationships with supervisors and, based on a clear understanding of the students’ current competencies and attributes, establish an agreement for vertical growth and development. Developmental progress is achieved by ongoing evaluation, feedback, and interaction as the student develops levels of competencies and capacities not previously attained. The expected outcome of these experiences is the integration of knowledge, skills, research, and professional attitudes and beliefs into a comprehensive, ethical model of professional practice. In this manner, students are trained to be practitioners with the confidence and experience to continue to work in and make contributions to the field of psychology. For more information, see Psychology Practicum (www.WaldenU.edu/c/Student_Catalog/10479_10573.htm), Psychology Internship (www.WaldenU.edu/c/Student_Catalog/10479_10558.htm).

Mental Health Counseling Practicum

The practicum is the first experiential training component of field experience. Practicum is defined as a “distinctly defined, supervised clinical experience in which the student develops basic counseling skills and integrates professional knowledge” (CACREP, 2001). It comprises 100 hours of clinical field experience: 30 hours of individual counseling, 10 of group counseling, and 60 of counseling-related activities.

Mental Health Counseling students are required to locate their own practicum site and site supervisor, which must be approved by the program’s coordinator of field experience. Students must ensure their field experiences meet their specific state board standards and requirements as well as those of the program.

Prerequisites

Students must successfully complete all of their core coursework and one residency (everything except the practicum and internship, the second residency, and thesis) before beginning the practicum field experience.

Completing a Practicum

Students completing a practicum must arrange for supervised practice in an appropriate setting. See Completing the Practicum Application below for details on preparing the necessary documents and forms.

Each student is responsible for finding a practicum site and a site supervisor. The coordinator of field experience must approve the site and the site supervisor before the student can begin the practicum.
Selecting a Practicum Site

Students should begin the site selection process early in their enrollment at Walden University. Students are encouraged to consider the type of training sites available in their community. Practicum sites may include, but are not limited to, community mental health agencies, private practice, hospitals (inpatient and outpatient services), university/college counseling centers, social service agencies, and employee assistance programs. Students will receive instruction on selecting a practicum site during their residencies.

Selecting a Practicum Site Supervisor

When selecting a practicum site, it is important for students to schedule a face-to-face appointment or an interview with a potential site supervisor to discuss the type of clinical experience possible (e.g., individual and group counseling, supervision). Students must ensure the site supervisor has the appropriate supervising credentials according to their state counseling board and the program requirements. The M.S. in Mental Health Counseling program encourages students to be supervised by a licensed professional counselor for their practicum field experience.

Completing the Practicum Application

Practicum applications are due 12 weeks prior to the term in which the practicum is to begin. Therefore, students should have the application materials prepared no later than the first day of the previous term. Practicum application materials are reviewed by the coordinator of field experience, and students are notified of the approval decision no later than 2 weeks after the application submission deadline.

The practicum application includes the following documents:

- Practicum Registration Intent form.
- Practicum Application Form (includes Practicum at Place of Employment if applicable).
- Counseling Training and Supervision Memorandum of Understanding.
- Agency Description Form.
- Practicum Learning Agreement.

Registering for COUN 6671 Practicum

To complete the practicum experience, students must register for COUN 6671 Practicum for one term (unless an extension is needed to fulfill the practicum hourly requirement). Registration for this course is limited to students who both meet the prerequisites and have an approved practicum application on file. Approval from the coordinator of field experience is required for initial registration.

To register for this course, students follow regular course registration procedures. Students are responsible for understanding the requirements of their state and should consult the rules and regulations of the licensing of professional counselors from the appropriate state licensing board.

Conflict Resolution at the Practicum Site

It is essential for students to keep their practicum faculty informed of any problems encountered at the practicum site. If a problem is detected, students should communicate that information immediately. Practicum faculty will discuss issues that need to be addressed with the site supervisor and the coordinator of field experience. The procedure for addressing conflict at a site is described in detail in the field experience manual.
Field Experience Manual

The field experience manual provides M.S. in Mental Health Counseling students with the information they need to be successful in their clinical field experiences. The manual addresses topics such as the application process, criminal background checks, malpractice insurance, completion of practicum, termination of practicum, procedures and policies (e.g., policy for resolving conflicts at the field experience site), extension of practicum, and evaluation forms.

Mental Health Counseling Internship

The internship field experience is completed after the student has fulfilled the practicum experience. According to the CACREP standards (2001), internship is “a distinctly defined, post-practicum, supervised ‘capstone’ clinical experience in which the student refines and enhances basic counseling or student development knowledge and skills and integrates and authenticates professional knowledge and skills appropriate to the student’s program and initial postgraduate professional placement.”

Prerequisites

Students who have successfully fulfilled their practicum requirements are able to apply for the internship field experience. Successfully completing the practicum field experience encompasses completing the hourly requirement, successfully completing COUN 6671 Practicum, and submitting all practicum field experience forms (e.g., the practicum hourly log, site supervisor evaluation). Students should refer to the field experience manual for more detail.

Completing an Internship

Students completing an internship must arrange for supervised practice in an appropriate setting. See Completing the Internship Application below for details on preparing the necessary documents and forms.

Students are responsible for selecting an internship field experience site and site supervisor. The coordinator of field experience must approve the internship site as well as the site supervisor before the student can begin the internship.

Selecting an Internship Site

Students are encouraged to attempt to secure an internship site simultaneously while finding a practicum site. Students are allowed to complete their practicum and internship field experiences at the same site and/or with the same organization. Internship sites may include, but are not limited to, community mental health agencies, private practice, hospitals (inpatient and outpatient services), university/college counseling centers, social service agencies, and employee assistance programs. Students will receive instruction on selecting an internship site during their residencies.

Selecting a Internship Site Supervisor

When selecting an internship site, it is important for students to schedule a face-to-face appointment or an interview with a potential site supervisor to discuss the type of clinical experience possible (e.g., individual counseling, group counseling, supervision). Students must ensure the site supervisor has the appropriate supervising credentials according to their state counseling board and the program requirements. The M.S. in Mental Health Counseling program encourages students to be supervised by a licensed professional counselor for their internship field experience.
Students who complete their practicum and internship field experiences at the same site and/or with the same organization are required to have a different site supervisor for each clinical experience (i.e., the site supervisor for the practicum must be different than the site supervisor for the internship). Both site supervisors must be approved by the coordinator of field experience.

**Completing the Internship Application**

Internship applications are due 12 weeks prior to the term in which the internship is to begin. Therefore, students should have the application materials prepared no later than the first day of the previous term. Internship application materials are reviewed by the coordinator of field experience, and students are notified of the approval decision no later than 2 weeks after the application submission deadline.

The internship application includes the following documents:

- *Internship Application Form* (includes *Practicum at Place of Employment* if applicable).
- *Counseling Training and Supervision Memorandum of Understanding*.
- *Agency Description Form*.
- *Internship Learning Agreement*.

**Registering for COUN 6682 Internship**

To complete the internship experience, students must register for COUN 6682 Internship for two terms (unless an extension is needed to fulfill the internship hourly requirement). Registration for this course is limited to students who both meet the prerequisites and have an approved internship application on file. Approval from the coordinator of field experience is required for initial registration.

To register for this course, students follow regular course registration procedures. Students are responsible for understanding the requirements of their state and should consult the rules and regulations of the licensing of professional counselors from the appropriate state licensing board.

**Conflict Resolution at Internship Site**

It is essential for students to keep their internship faculty informed of any problems encountered at the internship site. If a problem is detected, students should communicate that information immediately. Internship faculty will discuss issues that need to be addressed with the site supervisor and the coordinator of field experience. The procedure for addressing conflict at a site is described in detail in the field experience manual.

**Field Experience Manual**

The field experience manual provides M.S. in Mental Health Counseling students with the information they need to be successful in their clinical field experiences. The manual addresses topics such as the application process, criminal background checks, malpractice insurance, completion of practicum, termination of practicum, procedures and policies (e.g., policy for resolving conflicts at the field experience site), extension of practicum, and evaluation forms.
Psychology Practicum

The practicum is an intense supervised field experience with clear boundaries and less breadth and responsibility than those associated with an internship. Students, under the supervision of qualified professionals, learn to integrate learning and research in the practice of developing specific skills sets and/or working with new client populations.

Adequate preparation is essential to the success of the practicum experience. Students must ensure their field experiences meet their specific state board standards and requirements. The practicum will take at least two quarters, and students must register for a minimum of two quarters.

Prerequisites

To enroll in PSYC 8871 Practicum, students must meet the following prerequisites:

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<tr>
<th>Clinical Psychology Specialization</th>
<th>PSYC 8361 Advanced Psychological Testing</th>
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<tr>
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<td>PSYC 8705 Ethics and Standards of Professional Practice</td>
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<td>PSYC 8721 Advanced Psychopathology</td>
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<td>PSYC 8722 Counseling and Psychotherapy Theories</td>
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<tr>
<td>Counseling Psychology Specialization</td>
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<td>PSYC 8723 Multicultural Counseling</td>
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Completing a Practicum

Students completing a practicum must arrange for supervised practice in a setting appropriate to their specialization. See Completing the Practicum Application below for details on preparing the necessary documents and forms. Because a practicum is a site experience as well as an online course with residency seminar, students must complete the following steps:
1. Arranging for the Practicum

As in other doctoral programs, students in the School of Psychology arrange their own practicum. The requirements for PSYC 8871 Practicum are specified in the course syllabus that appears in the Psychology Curriculum Guide. These requirements dictate that the practicum be for a minimum of 750 hours, of which 200 hours must be in the area of clinical assessment and diagnostics, including, where appropriate, the use of psychological testing and measurement and the formulation and implementation of intervention strategies. Another 200 hours are assigned to direct intervention services. The remaining hours are to be devoted to individual supervision, group supervision, case management, record keeping, and related training activities. Before a practicum can begin, students must complete the following steps:

- Arrange for the practicum and ensure that the site meets Walden and state board requirements.
- Complete and submit the practicum application before the deadline. The deadline is approximately 12 weeks (one full quarter) prior to the intended start of the practicum experience.
- Register for PSYC 8871 Practicum.

2. Selecting a Practicum Site

Students should begin the site selection process early in their enrollment. The site should supply training duties designed to expand the student's skills and experience, as well as provide the hours necessary to meet the goals outlined in the PSYC 8871 Practicum syllabus.

Consortium Partnerships

If a consortium of different organizations is developed into a practicum, the student must develop a document identifying the following:

- The nature and characteristics of the participating entities.
- The rationale for the consortium partnership.
- Each partner’s commitment to the training/education program, its philosophy, model, and goals.
- Each partner’s obligations regarding contributions and access to resources.
- Each partner’s adherence to central control and coordination of the training program.
- Each partner’s commitment to uniform administration and implementation of the program’s training principles, policies, and procedures addressing trainee/student admission, financial support, training resource access, potential performance expectations, and evaluations.
- The nature of the supervision, identifying who will provide it for each organization.
- The name and contact information for each supervisor.
- Identification of the supervisor who will provide overall coordination of the experience.

Clinical directors, supervisors, and the student must sign this document and submit it as part of the practicum application.

Conflict of Interest

Students employed professionally may want to convert their work setting into a practicum experience; however, this may entail a potential conflict of interest situation as described in the “Ethical Principles of Psychologist and Code of Conduct of the American Psychological Association” (www2.apa.org/ethics/code2002.doc):

3.05 Multiple Relationships

(a) A multiple relationship occurs when a psychologist is in a professional role with a person and 1) at the same time is in another role with the same person, 2) at the same time is in a relationship with a person closely associated with or related to the person with whom the psychologist has the professional relationship, or 3) promises to enter into another relationship in the future with the person or a person closely associated with or related to the person.
A psychologist refrains from entering into a multiple relationship if the multiple relationship could reasonably be expected to impair the psychologist’s objectivity, competence, or effectiveness in performing his or her functions as a psychologist, or otherwise risks exploitation or harm to the person with whom the professional relationship exists.

Conducting a field experience at a current or previous place of employment may result in a potential for a conflict of interest that could invalidate the purpose of the field experience. The goals of these experiences are to develop specific skills and to obtain experience in environments free of the potential bias of previous professional or personal relationships. The following rules are intended to preserve the integrity of the field experience.

If possible, students should arrange to conduct field experiences at sites not associated with their current or previous work settings. When that is not possible, a psychologist who has a relationship with the student’s current work setting may be considered for approval as a supervisor provided that the practicum is clearly separated from the student’s professional position. In this case, it is expected that the student would work in a different department, under a different supervisor, and with clients he or she would not see in the usual work in the setting. Other conditions to this policy include the following:

- A practicum will not be approved if the student has a personal affiliation (e.g., marriage, family relationship, close friendship) with any supervisory personnel or with owners of the agency or site.
- A practicum will not be approved if the student has a supervisory position or proprietary interest in the agency or site.
- A practicum will not be approved if other potential conflict-of-interest problems not specified above exist that, as determined by the field training coordinator for the specialization and with concurrence of the dean (or the dean’s designee), constitute an ethical problem.

Students must review the Conflict of Interest statement and sign a Conflict of Interest Affirmation as part of the practicum application. Students who have no options other than a current work site must review and sign the Field Placement at Work Site form.

3. Selecting a Practicum Supervisor

Selection of the supervisor is critical to ensuring the success of the practicum. The practicum supervisor facilitates the professional development of the student, promotes development of needed competencies, and evaluates progress and services provided. The preferred site supervisor is a licensed psychologist. In some instances, an experienced professional from another discipline may be approved as a supervisor if that individual is competent to train in the area of specialization and qualifies under the rules of the licensing board in question. The presence of other practicum or internship students is expected and is required by some states, although this is more common when it comes to internship. Students must check their state requirements.

Students selecting a private practice as the practicum site may have to consider paying for supervision. They must also review their state licensing board rules and regulations to determine the acceptability of this practice.

4. Writing a Supervision Contract

The student and practicum supervisor must develop a contract that establishes well-defined goals and boundaries for the practicum. The contract must be specific, detailed, and include the following elements:

- Supervisor’s name and title.
- Supervisor’s degree and university.
- Supervisor’s licensing state, license number, and license type.
supervisor’s full contact information.
Skills, knowledge, and professional attributes that the learner is expected to bring to the site.
Skills, knowledge, and professional attributes that the learner is expected to develop in the practicum.
Description of how and when supervision will be provided, including the following:
  - Beginning and ending dates and frequency of supervision.
  - Supervisor’s expectations of the trainee.
  - Supervisor’s approach to supervision (e.g., behavioral, process-oriented, psychodynamic).
Signatures of the supervisor and the student.

Practicum Requirements
These elements are required of the practicum and must be included in the supervision contract:
- The practicum will be for a minimum of 750 hours with one hour of supervision for every 10–15 hours worked.
- At least half of the supervision must be individual as opposed to group.
- If the site utilizes psychological testing, it is expected that the appropriately trained student will be allowed to perform testing under appropriate supervision.

5. Developing a Practicum Training Manual
A practicum training manual describing the content of the practicum experience must exist and be endorsed by the practicum supervisor and should indicate the policies and procedures the student will be expected to follow at the practicum site. If the student uses an existing manual, an addendum must be added specifying how the practicum is compatible with the site’s training manual. If such a manual does not exist at the practicum site, the student must create one in cooperation with the practicum supervisor.

Below is an outline of topics for developing a practicum training manual:
- Training program description.
- Outcomes/goals of training.
- Site policies and procedures related to the training program or trainee (e.g., maintaining case files and notes, client confidentiality, site personnel policies).
- Suicide policy for the site.
- Linkages with/among departments or sites (if applicable).
- Supervision (type of supervision to be provided, responsibilities of the supervisor).
- How evaluation of trainees will be accomplished.
- Role and responsibilities of trainee, self-evaluation of trainee.
- Adherence to ethical standards.

6. Securing Student Malpractice Insurance
Student malpractice insurance is required for the practicum. Students who maintain professional liability insurance as licensed counselors or other mental health professionals should note that this type of insurance would not substitute for student malpractice insurance. The American Professional Agency and the American Psychological Association Insurance Trust provide malpractice insurance for graduate psychology students. Students may contact the American Professional Agency and ask for the student department or visit the American Psychological Association Insurance Trust Web site (www.apait.org). The practicum site and the university do not have to be approved by the American Psychological Association to obtain student insurance for the practicum. Students should secure at least $1 million liability coverage.
7. Criminal Convictions Clearance
An official statement from the state police of the student’s state of residence, disclosing any criminal convictions or lack thereof, is required. (Misdemeanors do not need to be reported.)

Completing the Practicum Application
Practicum applications are due no later than the first day of the term preceding the term in which the practicum is to begin (see the current schedule below). Any necessary changes must be made and the application must be approved by the field training coordinator for the specialization by the first day of the month preceding the field experience.

Practicum Application Deadlines

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<tr>
<th>Application Due*</th>
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<tr>
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<tr>
<td>March 1</td>
<td>Summer term</td>
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</tbody>
</table>

The practicum application includes the following documents:
- Practicum cover sheet and completion instructions.
- Practicum application form.
- Curriculum audit completed by School of Psychology advisors.
- Transcript audit completed by School of Psychology advisors.
- Student’s curriculum vitae.
- Site brochure(s).
- Signed Conflict of Interest Affirmation.
- Consortium description document, if applicable (see above).
- Practicum supervisor’s resume.
- Supervision contract (see above).
- Practicum training manual (see above).
- Verification of student malpractice insurance, including a copy of the policy declaration page.
- An official statement from the state police of the student’s state of residence disclosing any criminal convictions or lack thereof. (Misdemeanors do not need to be reported.)
- Completion of Work Place Request form, if applicable (see above).
- Personal State Licensure Plan.
- Completed self-evaluation/assessment.
- Agency mission and services.
- Agency accreditations.

Students must submit the entire practicum application for consideration. All documents must include the student’s name and email address. Approval to begin the practicum is contingent upon approval of the application and practicum site.
Registering for PSYC 8871 Practicum

To complete the practicum experience, students must register for PSYC 8871 Practicum for at least two terms, three credits each term. If the practicum requirements cannot be completed in this period, students are required to register for additional terms of PSYC 8871 until the requirement is successfully met. Students will participate in the residency seminar for each and every term they are registered for 8871. Students receive a grade of S (Satisfactory) or U (Unsatisfactory). Registration for this course is limited to students who both meet the prerequisites and have an approved practicum application on file. Approval of the field training coordinator for the specialization is required for initial registration; however, students may register for subsequent quarters without additional approval.

To register for this course, students follow regular course registration procedures. Students must register for at least two terms of PSYC 8871 Practicum. Some states may require more than two terms of practicum. Students are responsible for understanding the requirements of their state and should consult the rules and regulations of the licensing of psychologists from the appropriate state licensing board.

Executing the Practicum and Fulfilling the Course Requirements

The practicum is a site experience as well as an online course with a residency seminar; therefore, students participate in course activities while completing the practicum. To acquire the practicum hours for each quarter, student must receive a satisfactory evaluation from the site supervisor and satisfactorily complete the 8871 course. Students are required to participate in the online course in accordance with the information provided in the course syllabus.

Students are required to keep a journal of practicum activities with a minimum of two entries per week. Journal entries should focus on the practicum experience, perceived personal strengths and weaknesses, any personal insights gained through the practicum, newly developed skills, and challenges. Only the faculty for PSYC 8871 Practicum will review the journals, and the information will be kept confidential. The faculty will return journals to students if a self-addressed, stamped envelope is included.

Students must complete a 10-page paper summarizing the learning experience and the outcomes of the practicum. This may be presented in the form of a conceptualization paper that focuses on the client, issues, and context.

Students are responsible for ensuring that their on-site supervisor submits an evaluation of their work to the university. Students cannot receive a grade until the on-site supervisor’s evaluation has been received. The grade is assigned by the practicum faculty, not the on-site supervisor.

Terminating a Practicum

In the event a practicum is terminated prior to completion, none of the hours or activities can be transferred to another practicum site without the written permission of the field training coordinator for the specialization.

If Problems Are Encountered at the Practicum Site

It is essential that students keep their practicum faculty informed of any problems encountered at the practicum site. If a problem is detected, students should communicate that information immediately. Practicum faculty will discuss issues that need to be addressed with the field training coordinator for the specialization.
Psychology Internship

An internship is required for students enrolled in the Clinical Psychology, Counseling Psychology, and School Psychology specializations, and is a critical part of doctoral study for these students. A psychology internship is an organized training experience that, in contrast to supervised experience or on-the-job training, is designed to provide students with a planned, programmed sequence of training experiences. The professionally supervised training experiences of internship are characterized by greater depth, breadth, duration, frequency, and intensity than practicum training. The primary focus and purpose is assuring breadth and quality of training. The students’ experiences working in the field and actively participating in the Walden School of Psychology classrooms help them develop the attitudes that will enable their effective personal interaction and participation in an interdisciplinary approach to problems of research and practice.

The internship is an intense, broad-reaching experience that provides students the experience of a fully practicing psychologist, while under professional supervision. The internship agency has a clearly designated doctoral-level staff psychologist who is responsible for the integrity and quality of the training program. This person is actively licensed, certified, or registered by the State Board of Examiners in the jurisdiction where the program exists and is present at the training facility for a minimum of 20 hours a week.

Adequate preparation is essential to the success of the internship experience. Students must ensure that their field experiences meet their specific state board standards and requirements. The internship is completed in a minimum of four quarters (full time), but additional quarters may be taken.

Prerequisites

Students must complete all other courses except Dissertation before beginning an internship. Having a dissertation started or even completed is desirable, though not mandatory.

Completing an Internship

Students completing an internship must arrange for supervised practice in a setting appropriate to their specialization. See the Completing the Internship Application section below for details on preparing the necessary documents and forms. Because an internship is a site experience as well as a university course, students must complete the following steps:

1. Arranging an Internship

As in other doctoral programs, students in the School of Psychology arrange their own internship. Students may elect to complete the Association of Psychology Postdoctoral and Internship Centers’ (APPIC) application to find an internship site. Students pursuing licensure must arrange a field-based supervised internship in a setting appropriate to their specialization. The internship must be for a minimum of 2,000 hours and scheduled as either a full-time experience for one year or a half-time experience for 2 years. Part-time internships may not exceed 2 calendar years. Licensing jurisdictions vary in their requirements for the number of hours needed and the length of time required. The following URL gives the licensing requirements (to include internship requirements) for various states: www.asppb.org/about/boardContact.aspx. This is just a starting point and may be out of date; students should check their state’s Web site.
Students are responsible for knowing the requirements of their state’s psychology board and for arranging an internship that meets those requirements. The internship must also be consistent with the requirements described in the PSYC 8882 Internship syllabus. An APA-approved internship automatically satisfies the requirements stipulated in Walden’s internship requirements, but the required application form for internship, as well as other requirements such as insurance and criminal background check, must still be completed. Sites approved by APPIC will typically satisfy Walden’s internship requirements. Before an internship can begin, students must complete the following steps:

- Arrange for the internship and ensure that the site meets Walden and state board requirements.
- Complete the internship application and submit it to the field training coordinator for the specialization before the deadline. The deadline is the first day of the term preceding the field training start (e.g., June 1 for a September start).
- Receive approval of the internship application by the first day of the month preceding the field training start (e.g., Aug. 1 for a September start).
- Register for PSYC 8882 Internship.

2. Selecting an Internship Site
The site should supply training duties designed to expand the student’s skills and experience, as well as provide the hours necessary to meet the goals outlined in the PSYC 8882 Internship syllabus.

All internship sites must publicly acknowledge students as doctoral interns from the psychology program at Walden University. Students must use the title of doctoral intern when signing any site report or document. Students must have approval, by signature, from their internship supervisor for all documents signed as an intern. All staff at the facility must recognize students as interns, and informed consent forms signed by clients must acknowledge students as doctoral interns.

Consortium Partnerships
The internship is a single organized program, but may include multiple clinical settings. Students may arrange a consortium internship that involves more than one site (maximum of three) under the coordinating supervision of a licensed psychologist. (The licensed psychologist does not have to work for more than one of the sites.) If a consortium of different organizations is developed into an internship, the student must develop a document identifying the following:

- The nature and characteristics of the participating entities.
- The rationale for the consortium partnership.
- Each partner’s commitment to the training/education program, its philosophy, model, and goals.
- Each partner’s obligations regarding contributions and access to resources.
- Each partner’s adherence to central control and coordination of the training program.
- Each partner’s commitment to uniform administration and implementation of the program’s training principles, policies, and procedures addressing trainee/student admission, financial support, training resource access, potential performance expectations, and evaluations.
- The nature of the supervision, identifying who will provide it for each organization.
- The name and contact information for each supervisor.
- Identification of the supervisor who will provide overall coordination of the experience.

Clinical directors, supervisors, and the student must sign this document and submit it as part of the internship application.

Conflict of Interest
Students employed professionally may want to convert their work setting into an internship experience; however, this may entail a potential conflict of interest situation as described in the “Ethical Principles
3.05 Multiple Relationships

(a) A multiple relationship occurs when a psychologist is in a professional role with a person and 1) at the same time is in another role with the same person, 2) at the same time is in a relationship with a person closely associated with or related to the person with whom the psychologist has the professional relationship, or 3) promises to enter into another relationship in the future with the person or a person closely associated with or related to the person.

A psychologist refrains from entering into a multiple relationship if the multiple relationship could reasonably be expected to impair the psychologist’s objectivity, competence, or effectiveness in performing his or her functions as a psychologist, or otherwise risks exploitation or harm to the person with whom the professional relationship exists.

Conducting a field experience at a current or previous place of employment may result in a high potential for a conflict of interest that could invalidate the purpose of the field experience. The goals of these experiences are to develop specific skills and to obtain experience in environments free of the potential bias of previous professional or personal relationships. The following rules are intended to preserve the integrity of the field experience.

If possible, students should arrange to conduct field experiences at sites not associated with their current or previous work settings. When that is not possible, a psychologist who has a relationship with the student’s current work setting may be considered for approval as a supervisor provided that the internship is clearly separated from the student’s professional position. In this case, it is expected that the student would work in a different department, under a different supervisor, and with clients he or she would not see in the usual work in the setting. Other conditions to this policy include the following:

- An internship will not be approved if the student has a personal affiliation (e.g., marriage, family relationship, close friendship) with any supervisory personnel or with owners of the agency or site.
- An internship will not be approved if the student has a supervisory position or proprietary interest in the agency or site.
- An internship will not be approved if other potential conflict-of-interest problems not specified above exist that, as determined by the field training coordinator for the specialization and with concurrence of the dean (or the dean’s designee), constitute an ethical problem.

Students must review the Conflict of Interest statement and sign a Conflict of Interest Affirmation as part of the internship application. Students who have no other options but a current work site, must review and sign the Field Placement at Work Site form.

3. Selecting an Internship Supervisor

Selection of the supervisor is critical to ensuring a successful internship. The internship supervisor facilitates the professional development of the student, promotes development of needed competencies, and evaluates progress and services provided. The primary supervisor must be a state-licensed psychologist. A secondary supervisor, who is state-licensed, is expected. Students who are unable to establish a second supervisor will be required to complete the Acceptance of Risk statement.

4. Writing a Supervision Contract

The student and internship supervisor must develop a contract that establishes well-defined goals and boundaries for the internship. The contract must be specific, detailed, and include the following elements:

- Supervisor’s name and title.
• Supervisor’s degree and university.
• Supervisor’s licensing state, license number, and license type. (Supervisor must be fully licensed in his or her state. Doctoral-level supervisors must be 3 years post-license; non-doctoral-level supervisors must be 5 years post-license. A copy of the supervisor’s license is to be included in the application packet.)
• Supervisor’s full contact information.
• Skills, knowledge, and professional attributes that the learner is expected to bring to the site.
• Skills, knowledge, and professional attributes that the learner is expected to develop in the internship.
• Description of how and when supervision will be provided, including the following:
  o Beginning and ending dates and frequency of supervision.
  o Supervisor’s expectations of the trainee.
  o Supervisor’s approach to supervision (e.g., behavioral, process-oriented, psychodynamic).
• Description that the intern will be designated at the site as a “Psychology doctoral intern.”
• Signatures of the supervisor and the student.

**Internship Requirements**

These elements are required of the internship and must be included in the supervision contract:

• At least 45% of the internship must include direct participation in activities such as assessment/testing services, intervention services (individual and group), consultation services, teaching, research, and interdisciplinary collaboration.
• A minimum of 2 hours of individual supervision must occur each week, addressing, in part, the delivery of psychological services rendered by the intern. (A secondary supervisor is highly desirable but not required.) The student must document these hours.
• Additional supervision hours each week may include case conferences involving other trainers or staff development activities. It is desirable for two or more trainees to be present during the internship period.

5. **Developing an Internship Training Manual**

An internship training manual describing the policies, procedures, and content of the internship must exist and be endorsed by the internship supervisor. If such a manual does not exist at the internship site, the student must create one in cooperation with the internship supervisor.

The educational requirements for PSYC 8882 Internship are specified in the course syllabus. Those requirements and the topics listed below must be reflected in the training manual:

• Training program description.
• Outcomes/goals of training.
• Site policies and procedures related to the training program or trainee (e.g., maintaining case files and notes, client confidentiality, site personnel policies).
• Suicide policy for the site.
• Linkages with/among departments or sites (if applicable).
• Trainee:
  o Role and responsibilities.
  o Designation as a Walden doctoral intern in title and on all documentation.
  o Self-evaluation.
  o Adherence to ethical standards.
• Supervisor:
  o Type of supervision to be provided.
  o Responsibilities of the supervisor.
o How evaluation of intern will be accomplished.
o Number of interns on site (minimum of two required). If there is only one, the student must complete the Acceptance of Risk statement.
o Educational component (seminars, workshops, training program, etc.).
o Research component (not required but desirable).
o Signature of supervisor.

6. Securing Student Malpractice Insurance
Student malpractice insurance is required for the internship. Students who maintain professional liability insurance as licensed counselors or other mental health professionals should note that this type of insurance will not substitute for student malpractice insurance. The American Professional Agency and the American Psychological Association Insurance Trust provide malpractice insurance for graduate psychology students. Students may contact the American Professional Agency and ask for the student department or visit the American Psychological Association Insurance Trust Web site (www.apait.org). The internship site and the university do not have to be approved by the American Psychological Association to obtain student insurance for an internship. Students should secure at least $1 million liability coverage.

Completing the Internship Application
Internship applications are due no later than the 15th day of the middle month of the term preceding the term in which the internship is to begin (see the current schedule below).

Internship Application Deadlines

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The internship application includes the following documents:
• Internship cover sheet and completion instructions.
• Internship application form.
• Current audit completed by School of Psychology advisors.
• Student’s curriculum vitae.
• Site brochure(s).
• Signed Conflict of Interest Affirmation.
• Consortium description document, if applicable (see above).
• Internship supervisor’s curriculum vitae (professional resume).
• Supervision contract (see above).
• Internship training manual (see above).
• Verification of student malpractice insurance, including a copy of the policy declaration page.
• Official statement from the state police of the student’s state of residence, disclosing any criminal convictions or lack thereof. (Misdemeanors do not need to be reported.) The statement filed for the practicum may be used if not more than 18 months old.
• Completion of Work Place Request form, if applicable.
• Personal State Licensure Plan.
• Completed self-evaluation/assessment.
• Agency mission and services.
• Agency accreditations.

Students must submit the entire internship application package to the field training coordinator for the specialization. All documents must include the student’s name and email address. Permission to register for PSYC 8882 Internship is contingent upon approval of the application and the internship site.

Registering for PSYC 8882 Internship

To complete the internship experience, students must register for PSYC 8882 Internship for a minimum of 12 credits (three credits per term for four terms). This is a university course, and students receive a grade of S (Satisfactory) or U (Unsatisfactory). Registration for this course is limited to students who have completed all coursework and who have an approved internship application on file with the field training coordinator for the specialization. Students are required to participate in an online course every term in which they are registered for PSYC 8882. Approval of the field training coordinator for the specialization is required for initial registration; however, students may register for subsequent quarters without additional approval.

To register for this course, students follow regular course registration procedures. The field training coordinator for the specialization will assign registered students to a course section. Students must complete a minimum of 2,000 hours in the internship, requiring at least four terms of PSYC 8882 Internship. Students typically spend a minimum of 20 hours per week at the internship site. Students who are unable to complete the required hours within four terms will be required to register for additional terms, to include participation in the online class, until the internship is completed successfully.

Executing the Internship and Fulfilling the Course Requirements

Internship is a site experience as well as a university course; therefore, students must complete site requirements as well as course requirements determined by the course faculty and posted in the syllabus. Students should keep copies of all internship-related materials. To acquire the internship hours for each quarter, student must receive a satisfactory evaluation from the site supervisor and satisfactorily complete the 8882 course. Students are expected to make weekly classroom postings in PSYC 8882 Internship. This contact should include a report of activities for the week and descriptions of cases or training experiences. The course syllabus will guide class activities.

Students may be required to submit samples of their work (e.g., psychological evaluation, theory summary) depending upon the faculty and their specialization. Students are required to submit a progress report in the form of a narrative summary of learning experiences. Students submit a report to the faculty for PSYC 8882 Internship at the end of each term. The report should discuss training activities, supervision contacts, and progress toward achieving the objectives and goals of the internship.

At the end of each quarter, students submit the following items to the course faculty:
• Internship assessment form signed by the site supervisor.
• A narrative report summarizing the internship experience for the quarter.

At the conclusion of the internship, students submit the following items to the course faculty:
• Overall internship assessment form signed by the site supervisor.
- A narrative report summarizing the complete internship experience, including significant changes in the student’s professional practice that have occurred as a result of the internship experience.
- Internship documentation form signed by the site supervisor.

Students must ensure that their correct mailing address is included on these forms.

Students must inform the field training coordinator for the specialization and the School of Psychology academic advisors when their internship is complete.

**Terminating an Internship**

In the event an internship is terminated prior to completion, none of the hours or activities can be transferred to another internship site without the written permission of the director of field training.

**If Problems Are Encountered at the Internship Site**

It is essential that students keep their internship faculty informed of any problems encountered at the internship site. If a problem is detected, students should communicate that information immediately. Internship faculty will discuss issues that need to be addressed with the director of field training.

**Dissertation and Candidacy**

**Admission to Candidacy**

Students are admitted to candidacy when they have
- completed all required coursework except PSYC 8862 Internship, and
- demonstrated research competency.

Research competency is demonstrated by the successful completion of the following:
- Foundations for Graduate Study in Psychology (PSYC 6000).
- Research Design (PSYC 6310).
- Statistics 1 (PSYC 6305).
- Statistics 2 (PSYC 8305).
- Dissertation proposal.

**Dissertation Supervisory Committee**

An approved dissertation supervisory committee consists of three members: one content expert, one methods expert, and one additional member. Committee composition ideally includes two members from the student’s specialization and one outside the specialization or the school.

**Dissertation Chair**

Students who are not in a licensure specialization can have any member of the School of Psychology authorized to be their dissertation chair.
Students in licensure specializations (i.e., Clinical, Counseling, or School Psychology) must have a dissertation chair from the School of Psychology that holds a Ph.D., Ed.D., or Psy.D. in a licensure specialization. Students may petition for an exception to this rule (e.g., if a faculty member in a non-licensure specialization holds significant expertise in an area of student interest.)

**External Committee Members**

Faculty from another school or college within Walden University can serve on students’ dissertation committees with approval of the dissertation chair. *Note: The dissertation chair must be a School of Psychology faculty member.*

In some circumstances, students may want to have someone not affiliated with Walden University serve on the dissertation committee. The dissertation chair must approve the membership, and the student must formally petition the School of Psychology to gain approval. The person must provide expertise that no other person on the School of Psychology faculty could provide. In the petition, the student needs to include the outside member’s curriculum vitae, a detailed description of how this person will provide a scholarly contribution to the committee, and evidence that the dissertation chair approves the addition to the committee. The outside person must also supply information indicating that he or she has served on a dissertation committee or has conducted and published research. This person serves in addition to the three members from Walden University.

**Changing Committee Membership**

Students who wish to change membership of the committee must follow these steps:

1. Contact the prospective committee member and receive his or her agreement to serve on the committee. Contact the current committee member to let him or her know that a change is being initiated.
2. Fill out the *Student Petition Form* ([http://cfwu.WaldenU.edu/WU/petition.html](http://cfwu.WaldenU.edu/WU/petition.html)) requesting the change in committee member. The petition must include the following information:
   - The current committee member’s name.
   - The prospective committee member’s name.
   - The reason for requesting the change.
3. An advisor will send an email to both faculty members to get confirmation on their agreement to the change.
4. The advisor will send the petition with a recommendation to the assistant dean of student success for approval.
5. Once approved, the change will be made in the university’s student information database, and the rest of the committee will be notified.
Post-Doctoral Psychology Certificate

The requirements for the School of Psychology’s Post-Doctoral Psychology Certificate vary depending upon the area of specialization and the individual student. Admission to the certificate program carries with it a prescribed set of curriculum requirements tailored to fit the individual student’s needs and experience.

Students seeking a certificate must enroll for a minimum of four quarters and complete at least nine courses. Residency requirements include, at minimum, the completion of one 6-day Milestone 4 residency.

Certificate Requirements

- PSYC 6000 Foundations for Graduate Study in Psychology
- Minimum of eight additional courses, as prescribed in the offer of admission
- Full-time enrollment (two courses or 10 credits per quarter) for a minimum of four quarters
- One 6-day residency; additional residency requirements as prescribed in the offer of admission
- Minimum 3.0 GPA
School of Social Service

Ph.D. in Human Services

Social service practitioners face an increasingly diverse clientele, as delivery systems and client populations become more multicultural and include a broader range of complex issues. The Ph.D. in Human Services program prepares students to excel within a diverse service-delivery system by equipping them with action-oriented research skills and context-sensitive knowledge for application within unique practice environments.

Specializations

- General Program
- Clinical Social Work
- Counseling
- Criminal Justice
- Family Studies and Intervention Strategies
- Social Policy Analysis and Planning
- Human Services Administration
- Self-Designed

Degree Requirements

- 134 quarter credits
- Foundation course: SBSF 8005 (6 cr.)
- Professional Development Plan and Program of Study
- Core KAMs and the Foundation Research Sequence (56 cr.)
- Specialized KAMs (42 cr.)
- Satisfactory progress in all SBSF 7100 registrations
- Proposal, dissertation, and oral presentation (30 cr.)
- Minimum 10 quarters enrollment
- 20 days of academic residency (two 4-day and two 6-day residencies)

Core Curriculum

All students seeking the Ph.D. in Human Services complete the Foundation course (SBSF 8005), the Foundation Research Sequence, and three KAMs that focus on the social and behavioral science foundations important to all professions. All students complete the Ph.D. program with a dissertation.
Foundation Course (6 cr.)

*SBSF 8005 Foundations for Doctoral Study (6 cr.)*

All beginning Ph.D. in Human Services students are required to successfully complete this course, and are automatically enrolled in it during their first quarter. In this course, students develop a Professional Development Plan and a Plan of Study as their guide to the rest of their program.

Core KAM Curriculum (42 cr.)

**Core KAM I: Principles of Societal Development (14 cr.)**

KAM I offers students perspectives in the social and behavioral sciences and how they influence human values and lifestyles, communication, social networks, and forecasting alternative futures. Students begin to integrate theoretical constructs into practical applications for individual interest areas.

*Breadth: SBSF 8110 Theories of Societal Development (5 cr.)*
*Depth: SBSF 8120 Current Research in Societal Development (5 cr.)*
*Application: SBSF 8130 Professional Practice and Societal Development (4 cr.)*

**Core KAM II: Principles of Human Development (14 cr.)**

Students examine basic theories and current research on biological, psychosocial, cognitive, and affective human development, including normal developmental patterns and crises that may occur. Students explore developmental questions in the context of both chronological time and underlying physical, social, and psychological experiences.

*Breadth: SBSF 8210 Theories of Human Development (5 cr.)*
*Depth: SBSF 8220 Current Research in Human Development (5 cr.)*
*Application: SBSF 8230 Professional Practice and Human Development (4 cr.)*

**Core KAM III: Principles of Organizational and Social Systems (14 cr.)**

This KAM provides an introduction to systems theories from various disciplines. The primary models of structured system theories are presented as a background and theoretical framework for the other knowledge areas. Also studied are theories that impact micro and macro levels of social, political, and economic systems.

*Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)*
*Depth: SBSF 8320 Current Research in Organizational and Social Systems (5 cr.)*
*Application: SBSF 8330 Professional Practice and Organizational and Social Systems (4 cr.)*

**Criminal Justice Foundational Core KAMs**

Students who plan to declare a specialization in Criminal Justice but do not possess a master’s degree in Criminal Justice or a closely related field, must complete the core KAMs below, instead of the Human Services core KAMs listed above. These KAMs are designed to provide graduate-level foundational knowledge in the areas of societal development, human behavior, and organizational and social systems from a criminal justice perspective.

**KAM I: Principles of Societal Development (14 cr.)**

*Breadth: SBSF 8110 Theories of Societal Development (5 cr.)*
*Depth: HUMN 8120 Current Research in Societal Development: Criminal Justice (5 cr.)*
*Application: HUMN 8130 Professional Practice and Societal Development: Criminal Justice (4 cr.)*
**KAM II: Principles of Human Development (14 cr.)**
Breadth: SBSF 8210 Theories of Human Development (5 cr.)
Depth: HUMN 8220 Current Research in Human Development: Criminal Justice (5 cr.)
Application: HUMN 8230 Professional Practice and Human Development: Criminal Justice (4 cr.)

**KAM III: Principles of Organizational and Social Systems (14 cr.)**
Breadth: SBSF 8310 Theories of Organizational and Social Systems (5 cr.)
Depth: HUMN 8320 Current Research in Organizational and Social Systems: Criminal Justice (5 cr.)
Application: HUMN 8330 Professional Practice and Organizational and Social Systems: Criminal Justice (4 cr.)

**Foundation Research Sequence (14 cr.)**
The first and second courses are online seminars, requiring students to participate in weekly, Web-based discussions. The third course combines online activities and a 12-hour face-to-face meeting with a Walden residency. Faculty members guide discussions, require specific readings and written assignments, and evaluate assignments.

SBSF 8417 Research Seminar I: Human Inquiry and Science (4 cr.)
HUMN 8427 Research Seminar II: Design in Human Services Research (5 cr.)
HUMN 8437 Research Seminar III: Data Analysis in Human Services Research (5 cr.)

**Dissertation (30 cr.)**
HUMN 9000 Dissertation (30 cr.)

**Specialized Curriculum**
In addition to the Core Curriculum, students complete three specialized KAMs unique to the Human Services curriculum and appropriate to their specific area of study.

Before being admitted to any specialization other than the General Program, students must first complete KAMs I–III and SBSF 8417 Research Seminar I: Human Inquiry and Science from the Core Curriculum. Students then submit a completed *Intent to Declare a Specialization and Plan of Study for the Specialized KAMs in Human Services* form (available on the program Web site) to their faculty mentor. The faculty mentor reviews and signs the form before forwarding it to the dean or the dean’s designee. The dean or designee reviews the form, ensures that the student is appropriately prepared to undertake specialized study, and notifies the student within 10 working days of the results of this review. After receiving notification of approval from the dean or designee, students may proceed with the specialized KAMs, integrating content appropriate to the specialization into the breadth, depth, and application sections. The dissertation must also reflect the specialization.

**General Program**
The General Program offers an interdisciplinary approach to the study of social service.
Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

Breadth: HUMN 8510  Theories and Models of Human Behavior for Professional Practice (5 cr.)
Depth: HUMN 8520  Contextual Evaluation of Contemporary Theories and Models in Human Services (5 cr.)
Application: HUMN 8530  Integrating Theory and Practice in Human Services (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

Breadth: HUMN 8610  Advanced Theories of Intervention in Human Services (5 cr.)
Depth: HUMN 8620  Human Services Delivery Systems and Ethical Considerations (5 cr.)
Application: HUMN 8630  Integrating Intervention Strategies and Ethical Practice (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)

Breadth: HUMN 8710  Theories of Case Study Research and Applied Change in Human Services (5 cr.)
Depth: HUMN 8720  Relating Case Studies to Applied Change in Human Services (5 cr.)
Application: HUMN 8730  A Case Study of Applied Change in Human Services (4 cr.)

Clinical Social Work Specialization

The Clinical Social Work specialization focuses on the use, understanding, and development of models and theoretical frameworks for clinical practice with vulnerable and disadvantaged populations. It prepares clinical scholars who are well-grounded in the qualitative and quantitative methods of inquiry and highly skilled in a variety of intervention modalities. Graduates are prepared to become leaders in direct practice; enter university-level teaching or clinical research positions; or enter advanced positions in clinical administration, supervision, and consultation.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

Breadth: HUMN 8517  Theories and Models of Human Behavior for Professional Practice: Clinical Social Work (5 cr.)
Depth: HUMN 8527  Contextual Evaluation of Contemporary Theories and Models in Human Services: Clinical Social Work (5 cr.)
Application: HUMN 8537  Integrating Theory and Practice in Human Services: Clinical Social Work (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

Breadth: HUMN 8617  Advanced Theories of Intervention in Human Services: Clinical Social Work (5 cr.)
Depth: HUMN 8627  Human Services Delivery Systems and Ethical Considerations: Clinical Social Work (5 cr.)
Application: HUMN 8637  Integrating Intervention Strategies and Ethical Practice: Clinical Social Work (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)

Breadth: HUMN 8717  Theories of Case Study Research and Applied Change in Human Services: Clinical Social Work (5 cr.)
Depth: HUMN 8727  Relating Case Studies to Applied Change in Human Services: Clinical Social Work (5 cr.)
Application: HUMN 8737  A Case Study of Applied Change in Human Services: Clinical Social Work (4 cr.)
Counseling Specialization

The Counseling specialization is grounded in systems theory and intervention strategies. It focuses on healthy life adjustment; biopsychosocial stress; human diversity; and a synthesis of social, behavioral, and developmental approaches to human growth. The specialization’s learning philosophy emphasizes developmental theories and the broad application of these theories to research and practice in the preventive, therapeutic, and consultative realms of helping. Promoting positive, health-oriented growth with emphasis on helping others achieve greater psychological, social, academic, vocational, and ethical development is stressed.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

Breadth: HUMN 8515 Theories and Models of Human Behavior for Professional Practice: Counseling (5 cr.)

Depth: HUMN 8525 Contextual Evaluation of Contemporary Theories and Models in Human Services: Counseling (5 cr.)

Application: HUMN 8535 Integrating Theory and Practice in Human Services: Counseling (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

Breadth: HUMN 8615 Advanced Theories of Intervention in Human Services: Counseling (5 cr.)

Depth: HUMN 8625 Human Services Delivery Systems and Ethical Considerations: Counseling (5 cr.)

Application: HUMN 8635 Integrating Intervention Strategies and Ethical Practice: Counseling (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)

Breadth: HUMN 8715 Theories of Case Study Research and Applied Change in Human Services: Counseling (5 cr.)

Depth: HUMN 8725 Relating Case Studies to Applied Change in Human Services: Counseling (5 cr.)

Application: HUMN 8735 A Case Study of Applied Change in Human Services: Counseling (4 cr.)

Criminal Justice Specialization

The Criminal Justice specialization prepares and trains professionals to address current issues related to public safety, juvenile delinquency, the courts, and prisons. Students examine criminal behavior and society’s response to it and explore solutions for the control and elimination of criminal behavior. Students explore crime as a social phenomenon, studying demographic shifts, economic disparity among racial and ethnic groups, urban decay, and the role of substance abuse in criminal behavior. They also study criminological theory, the nature of crime, the criminal justice system and its administration, the factors that lead people to commit crimes, and planned change in the criminal justice system.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

Breadth: HUMN 8512 Theories and Models of Human Behavior for Professional Practice: Criminal Justice (5 cr.)

Depth: HUMN 8522 Contextual Evaluation of Contemporary Theories and Models in Human Services: Criminal Justice (5 cr.)

Application: HUMN 8532 Integrating Theory and Practice in Human Services: Criminal Justice (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

Breadth: HUMN 8612 Advanced Theories of Intervention in Human Services: Criminal Justice (5 cr.)
Depth: HUMN 8622 Human Services Delivery Systems and Ethical Considerations: Criminal Justice (5 cr.)
Application: HUMN 8632 Integrating Intervention Strategies and Ethical Practice: Criminal Justice (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)
Breadth: HUMN 8712 Theories of Case Study Research and Applied Change in Human Services: Criminal Justice (5 cr.)
Depth: HUMN 8722 Relating Case Studies to Applied Change in Human Services: Criminal Justice (5 cr.)
Application: HUMN 8732 A Case Study of Applied Change in Human Services: Criminal Justice (4 cr.)

Family Studies and Intervention Strategies Specialization
The Family Studies and Intervention Strategies specialization focuses on the utilization of advanced clinical theory and research methodology within a unique client-centered ecological context. Students explore a broad spectrum of theoretical and clinical approaches to intervention: brief and solution-focused, structural, object relations, cognitive-behavioral, strategic, intergenerational, narrative, and social constructionism. Emphasis is also placed on feminist, minority, and gay-lesbian-bisexual-transgender issues. Students are strongly encouraged to develop their own integration of these therapeutic modalities and special treatment considerations.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)
Breadth: HUMN 8518 Theories and Models of Human Behavior for Professional Practice (5 cr.)
Depth: HUMN 8528 Contextual Evaluation of Contemporary Theories and Models in Human Services: Family Studies and Intervention Strategies (5 cr.)
Application: HUMN 8538 Integrating Theory and Practice in Human Services: Family Studies and Intervention Strategies (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)
Breadth: HUMN 8618 Advanced Theories of Intervention in Human Services (5 cr.)
Depth: HUMN 8628 Human Services Delivery Systems and Ethical Considerations: Family Studies and Intervention Strategies (5 cr.)
Application: HUMN 8638 Integrating Intervention Strategies and Ethical Practice: Family Studies and Intervention Strategies (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)
Breadth: HUMN 8718 Theories of Case Study Research and Applied Change in Human Services (5 cr.)
Depth: HUMN 8728 Relating Case Studies to Applied Change in Human Services: Family Studies and Intervention Strategies (5 cr.)
Application: HUMN 8738 A Case Study of Applied Change in Human Services: Family Studies and Intervention Strategies (4 cr.)

Social Policy Analysis and Planning Specialization
The Social Policy Analysis and Planning specialization focuses on the analysis of social policy, with an emphasis on social welfare and planning, and on the use, development, and protection of human and societal resources within multicontextual frameworks. Study includes historic, social, physical, political, cultural, economic, ecological, legal, key actor, spatial, technological, national, and institutional
frameworks. Analysts, planners, and development managers in this field seek the best use of these resources in the overall interest of society and study how communities organize and direct their relationship with the world around them. While covering an array of environments (urban, rural, community, regional, and national), the international focus on sustainable development is an integral part of this specialization.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

*Breadth*:

- HUMN 8516  Theories and Models of Human Behavior for Professional Practice: Social Policy Analysis and Planning (5 cr.)

*Depth*:

- HUMN 8526  Contextual Evaluation of Contemporary Theories and Models in Human Services: Social Policy Analysis and Planning (5 cr.)

*Application*:

- HUMN 8536  Integrating Theory and Practice in Human Services: Social Policy Analysis and Planning (4 cr.)

Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

*Breadth*:

- HUMN 8616  Advanced Theories of Intervention in Human Services: Social Policy Analysis and Planning (5 cr.)

*Depth*:

- HUMN 8626  Human Services Delivery Systems and Ethical Considerations: Social Policy Analysis and Planning (5 cr.)

*Application*:

- HUMN 8636  Integrating Intervention Strategies and Ethical Practice: Social Policy Analysis and Planning (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)

*Breadth*:

- HUMN 8716  Theories of Case Study Research and Applied Change in Human Services: Social Policy Analysis and Planning (5 cr.)

*Depth*:

- HUMN 8726  Relating Case Studies to Applied Change in Human Services: Social Policy Analysis and Planning (5 cr.)

*Application*:

- HUMN 8736  A Case Study of Applied Change in Human Services: Social Policy Analysis and Planning (4 cr.)

Human Services Administration Specialization

The Human Services Administration specialization explores the theoretical foundations of organizational behavior and the practice of management and planning with special attention to their sociopolitical, technical, and interpersonal dimensions. Topics for inquiry include program development and implementation, leadership, creating and sustaining interorganizational and community relations, and staff development and training. Students explore internal and systemic efforts organizations can make to improve the well-being of individuals and groups, to promote social justice, and to enhance social welfare.

Specialized KAM V: Advanced Theory and Practice in Human Services (14 cr.)

*Breadth*:

- HUMN 8514  Theories and Models of Human Behavior for Professional Practice: Human Services Administration (5 cr.)

*Depth*:

- HUMN 8524  Contextual Evaluation of Contemporary Theories and Models in Human Services: Social Service Administration (5 cr.)

*Application*:

- HUMN 8534  Integrating Theory and Practice in Social Service: Human Services Administration (4 cr.)

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Specialized KAM VI: Intervention Strategies in Human Services (14 cr.)

*Breadth:* HUMN 8614  Advanced Theories of Intervention in Human Services Administration (5 cr.)
*Depth:* HUMN 8624  Human Services Delivery Systems and Ethical Considerations: Human Services Administration (5 cr.)
*Application:* HUMN 8634  Integrating Intervention Strategies and Ethical Practice: Human Services Administration (4 cr.)

Specialized KAM VII: Advanced Case Study in Human Services (14 cr.)

*Breadth:* HUMN 8714  Theories of Case Study Research and Applied Change in Human Services: Social Service Administration (5 cr.)
*Depth:* HUMN 8724  Relating Case Studies to Applied Change in Human Services: Human Services Administration (5 cr.)
*Application:* HUMN 8734  A Case Study of Applied Change in Human Services: Human Services Administration (4 cr.)

Self-Designed Specialization

Students in the Ph.D. in Human Services program have the option to self-design a specialization. A self-designed specialization must fit within the existing range of expertise of the Social Service faculty and the KAM curriculum structure of the General Program. A self-designed specialization must be developed in consultation with program faculty and approved by the dean or the dean’s designee.

Declaring and Completing a Self-Designed Specialization

Students electing the Self-Designed specialization option should complete the *Program of Study* form using the General Program course numbers for the breadth, depth, and application components of each KAM. The depth and application components should include a subtitle that reflects the focus of the unique specialization. In the specialized or advanced KAMs, the titles of the breadth component must also reflect the unique specialization. Students selecting this specialization must first complete core KAMs I–III and SBSF 8417 Research Seminar I: Human Inquiry and Science from the Core Curriculum. Students then submit a completed *Intent to Declare a Specialization in Human Services and Plan of Study for the Specialized KAMs* form to their faculty mentor. The faculty mentor reviews and signs the forms before forwarding them to the dean or the dean’s designee. The dean or designee reviews the forms to ensure that the student is appropriately prepared to undertake a self-designed specialization and notifies the student within 10 working days of the results of this review. After receiving notification of approval from the dean or designee, students may proceed with the specialized KAMs, integrating content appropriate to the self-designed specialization into the breadth, depth, and application sections. The dissertation must also reflect the specialization. Academic work that does not adequately support the self-designed specialization will be returned to the student for revision. Human Services students pursuing a self-designed specialization must attach a copy of the approved *Intent to Declare a Specialization in Human Services* form to all Learning Agreements, KAMs, the proposal, and the dissertation.
Course Descriptions

Students are encouraged to carefully evaluate the prerequisites for each course to make sure they are properly prepared. Questions concerning prerequisites should be directed to an academic advisor.

AMDS

**AMDS 8000 Success Strategies in the Online Learning Environment (4 cr.)**
This course is designed to provide students with an understanding of the expectations for becoming successful online learners, and to familiarize them with Walden’s mission, the School of Management, and the Information Systems Management specialization. In addition, students learn to use the online learning environment, including Internet tools such as email, Web browsers, and other techniques of online communication and interaction with faculty, administration, and students. Students practice APA formatting, writing skills, critical-thinking skills, case-study methods, time and stress management, and group activities in doctoral work. Students also learn about student services, including registering online, ordering textbooks, and preparing their Program Development Plan (PDP) and Program of Study (POS), and are introduced to the KAM process.

**AMDS 8110 Management Information Systems (4 cr.)**
This course provides broad coverage of information systems management concepts and trends underlying current and future developments, as well as principles for providing effective implementation of information technology. The course is heavily case- and discussion-oriented. A business case study is usually assigned, as well as one or more articles or chapters, for each class. Students are expected to be able to develop and define, as necessary, their position and reasoning on a variety of current issues in information systems as the course progresses.

**AMDS 8125 Organizational Performance Improvement (4 cr.)**
This course is designed to acquaint students with the concepts of performance improvement and process re-engineering. Achieving high-level improvements in organizational performance through redesigned business processes and using information technology to re-engineer an organization are central to the course.

**AMDS 8135 Project Management (4 cr.)**
This course explores the theory and practice of how to manage projects. Topics include effective project management styles, critical factors for project success, organizational support systems that enhance projects, project authority, and ethics in project execution. Cost, schedule, technical planning, and control methods are examined. Project management software is used for a typical project plan and tracking.

**AMDS 8215 Systems Analysis, Design, and Implementation (4 cr.)**
This course examines the analysis, design, and development of computer-based information systems. The key characteristics of object-oriented methodologies are presented and compared with traditional methods. Students are introduced to the life-cycle concept and related activities including information requirements determination, prototyping, detailed systems design, development, testing, and implementation strategies.
AMDS 8225 Database Concepts (4 cr.)
This course examines database systems as the focus for studying concepts of data modeling, techniques of data definition, and data manipulation. Methods for creating, managing, sorting, and processing data files are discussed. Concepts of relational database methods and issues of managing information in a database are covered.

AMDS 8235 Communications and Networking (4 cr.)
Students learn the concepts and terminology of data communications, network design, and distributed information systems. Topics include communications equipment, protocols and architecture, transmission alternatives, communications environments, regulatory issues, and network pricing and management.

AMDS 8300 Advanced Individual Studies: New Faculty Training (4 cr.)
This online faculty development course not only teaches the skills and strategies necessary for effective online teaching, it also gives students firsthand experience communicating within the actual software environment they may be using to teach an online course. The course replicates the Walden online classroom and provides a model for online instruction. It takes students from the initial stages of course content creation through actual setup of a classroom site.

AMDS 8301 Advanced Individual Studies: Publishing Option (4 cr.)
This option for advanced individual study is designed for students who wish to integrate learning from the core curriculum in preparation for advanced KAM and dissertation research.

AMDS 8305 Readings in Information Systems (4 cr.)
This course examines the Information Systems (IS) body of knowledge. Through a review of the literature, students classify and evaluate what accredited scholars and researchers have written on topics that interest them most. By studying the literature, students increase their understanding of what it means to be an IS doctoral student as well as a scholar-practitioner, including responsibilities, expectations, and roles.

AMDS 8316 Security Management and Risk Assessment (4 cr.)
This course covers the management aspects of information security from a business perspective. The focus is on assessing risks to an organization, identifying threats, and implementing safeguards on corporate networks and the Internet. Other topics include the return on security investment, business continuity planning, development of security policies, and information security auditing.

AMDS 8325 E-Commerce Strategies (4 cr.)
This course introduces students to the emerging theories and practices of e-commerce strategies. Strategies associated with both sides of the electronic commerce world are included: e-commerce solutions for existing companies and e-business concept development for venture startups.

AMDS 8335 Principles of Knowledge Management (4 cr.)
This course examines how information systems enable organizations to systematically identify, acquire, store, analyze, distribute, and reuse information and knowledge from all sources (e.g., internal and external, explicit and tacit) to enhance organizational productivity and competitiveness. The course also examines how information technology supports the organizational knowledge process. (6-week course. Completion is required in the first four quarters of enrollment for students in the Knowledge Management and Learning Management specializations.)
AMDS 8427 Research Seminar II: Design in Applied Management and Decision Sciences Research (5 cr.)
Topics include theory and hypothesis testing; variable definition and measurement; correlational, survey, observational, and nonexperimental designs; experimental designs; language, logic, and execution of qualitative designs; and integrated qualitative and quantitative designs. Students work on writing the dissertation prospectus. (Ph.D. students must complete this course before nominating the dissertation supervisory committee and generally take it while developing their dissertation proposal. Prerequisite: SBSF 8417.)

AMDS 8437 Research Seminar III: Data Analysis in Applied Management and Decision Sciences Research (5 cr.)
Topics include descriptive statistics; statistical inference; and quantitative techniques, including analysis of variance and covariance, multiple linear regression, and various nonparametric techniques. Other topics include software for data analysis, qualitative data reduction and analysis, data management techniques, and integrating qualitative and quantitative data for analysis. (Offered every quarter. In the spring and fall quarters, the course is totally online. In the summer and winter quarters, the online course includes a face-to-face component that is completed at an appropriate Walden residency. Prerequisite: SBSF 8417.)

AMDS 8800 Epistemology and the Practice of Knowledge and Learning Management (4 cr.)
This course reviews the history of knowledge from the early contributors, including Plato and Aristotle, to contemporary writers. It reviews the evolution of major movements, including rationalism, empiricism, functionalism, structuralism, and behaviorism. It covers contemporary authors involved with knowledge, learning, and change management, including Senge, Drucker, Deming, Nonaka, Garvin, Argyris, Knowles, and Rogers. The course provides a broad foundation for the study of knowledge and learning management. (12-week course. Completion is required in the first four quarters of enrollment for students in the Knowledge Management and Learning Management specializations.)

AMDS 8801 Principles of Learning Management (4 cr.)
This course defines learning and the emergence of learning management and reviews the responsibilities of the chief learning officer and the foundations of adult learning and development. The role of corporate universities and distance learning in support of organizational learning is reviewed. (6-week course. Completion is required in the first four quarters of enrollment for students in the Knowledge Management and Learning Management specializations.)

AMDS 8810 Integrating Knowledge Management With Strategic Initiatives (4 cr.)
The course provides an opportunity to examine major organizational change initiatives and determine how Knowledge Management (KM) can be used to leverage these initiatives. Emphasis is placed on KM as an integral and essential component of an organizational system at both operational and strategic levels. Factors such as quality, systems thinking, environmental scanning, convergence, and constructive conflict are emphasized as essential contributors in the integration of KM in planning, decision-making, and implementing operational and strategic initiatives. Embedded system elements like leadership and corporate culture are also addressed. Because the adoption of a KM initiative may require structural and behavioral change to gain organizational acceptability, ways to circumvent roadblocks and pursue pathways to needed change are addressed. (Prerequisites: SBSF 8005, AMDS 8335, AMDS 8800, and AMDS 8801; or permission of the program director.)

AMDS 8811 Advanced Knowledge Management Concepts (4 cr.)
This course reviews the merging roles of chief knowledge officers and chief learning officers. It explores the future direction of knowledge management based on the history of knowledge, the demands of global competition, the needs of 21st-century organizations, and the views of futurists looking at both
organizational change and organizational learning. *(Prerequisites: SBSF 8005, AMDS 8335, AMDS 8800, and AMDS 8801; or permission of the program director.)*

**AMDS 8812 Expert Systems (4 cr.)**
This course examines the role of expert systems in knowledge management, including the use of artificial intelligence, neural systems, and other advanced concepts in the creation, retrieval, and competitive use of knowledge. *(Prerequisites: SBSF 8005, AMDS 8335, AMDS 8800, and AMDS 8801; or permission of the program director.)*

**AMDS 8813 E-Systems (4 cr.)**
This course examines the role of e-systems, Internet, e-commerce, e-business, and business-to-business with knowledge management. It examines the new languages, HTML, and other emerging applications. *(Prerequisites: SBSF 8005, AMDS 8335, AMDS 8800, and AMDS 8801; or permission of the program director.)*

**AMDS 8830 Adult Learning (4 cr.)**
This course examines the foundational concepts essential for understanding and developing adult learning, including understanding the adult as a client, diagnostic procedures for adult education, participative learning, and small-group theory in adult education.

**AMDS 8831 Lifelong Learning (4 cr.)**
This course examines the role of lifelong learning in improving effectiveness of adult learners and in strengthening career development. It examines how individuals use education to develop career options, while organizations use education to help obtain and retain the best individuals.

**AMDS 8832 Education Design for Adult Learners (4 cr.)**
This course examines the theories and concepts of the learning process, including intelligence, cognition, motivation, and facilitation of adult learners. It examines the design and development of adult learning curriculum.

**AMDS 8833 Integration of Knowledge and Learning Management With Strategic Educational Initiatives (4 cr.)**
This course examines the design and use of appropriate organizational learning, including the use of corporate universities, distance-learning techniques, and other advanced educational concepts.

**AMDS 8899 Capstone Seminar (6 cr.)**
This course integrates all of the previous work on knowledge and learning management, resulting in a comprehensive dissertation proposal for each student. *(Prerequisites: SBSF 8005, AMDS 8335, AMDS 8800, AMDS 8801, all six specialization courses, and at least one KAM; or permission of the program director.)*

**COUN**

**COUN 5999 Continuing Project (non-credit)**
Students enrolled in master’s-level, course-based programs, and who have already registered for the required number of thesis or research project credits, should register for 5999 Continuing Project to complete the thesis or research project proposal or manuscript. Students will be automatically registered
for COUN 5999 after initial registration until the thesis is approved. (Prerequisites: All master’s coursework and all thesis credits. Cross-listed with PSYC 5999)

**COUN 6000 Foundations for Graduate Study in Mental Health Counseling (6 cr.)**
This course introduces students to Walden University and to the requirements for successful participation in an online curriculum. It provides a foundation for academic and professional success as a scholar-practitioner and social change agent. Course assignments focus on practical application of writing and critical-thinking skills and promote professional and academic excellence as they relate to practice in psychology and counseling. *(Previously listed as PSYC 8000 Foundations for Graduate Study in Psychology.)*

**COUN 6205 History and Systems of Counseling and Psychology (5 cr.)**
This course focuses on the historical and philosophical roots of psychology and counseling. Topics include structuralism, functionalism, behaviorism, psychoanalysis, gestalt, and existentialism, as well as contemporary perspectives including evolutionary psychology, positive psychology, postmodernism, and feminist psychology. Themes of diversity and multiculturalism in psychology and counseling are highlighted within each of the perspectives. *(Cross-listed with PSYC 6205. Previously listed as PSYC 6205 History and Systems in Psychology.)*

**COUN 6215 Lifespan Development (5 cr.)**
This course provides students with an overview of development through the lifespan, including childhood, adolescence, adulthood, and aging experiences. Physical, social, emotional, and cognitive issues are covered, as well as the expected developmental milestones during each of these phases of development. The latest research in attachment theory, brain research, and aging is included, and themes of diversity issues related to developmental research are highlighted throughout the course. *(Cross-listed with PSYC 6215.)*

**COUN 6250 Group Process and Dynamics (5 cr.)**
This course prepares students to work with groups in various settings. It examines group theory, process, and dynamics. Using relevant literature, multimedia resources, and a scholar-practitioner model, students develop an understanding of culturally and contextually relevant group practice, group leaders’ roles and responsibilities, the relevance and purpose of group work, and strategies for using groups to foster social change. Students also participate in a group experience in their community. *(Cross-listed with PSYC 6250.)*

**COUN 6331 Interviewing and Observational Strategies (5 cr.)**
This course focuses on principles and skills related to interviewing and observation as well as related legal, ethical, and cultural issues. Students gain practice in conducting interviews, making behavioral observations, collecting and interpreting data during an interview, and developing written reports of findings. *(Cross-listed with PSYC 6331.)*

**COUN 6390 Thesis (10 cr. — 5 cr. per term for 2 terms)**
This course provides students with the tools to integrate their Program of Study logically and comprehensively into an in-depth exploration of a topic of research interest. The goal of the course is the completion of the M.S. thesis. Students complete the thesis independently under the mentorship of a thesis chair. The thesis can be either a critical literature review with a proposed research design or an empirical study. After 10 credits of COUN 6390, students must register for PSYC 5999 until approval of thesis. *(Prerequisites: PSYC 6305, 6310, 6315, and an additional three courses. Cross-listed with PSYC 6390.)*
**COUN 6705 Professional Identity and Ethics in Counseling (5 cr.)**
This course provides students with an introduction to the field of professional counseling and the foundations of mental health counseling. The course addresses the following topics: history, philosophy, client and counselor advocacy with an emphasis on the counselor’s role as social change agent, cultural dynamics, consultation, and trends in professional and mental health counseling. The counseling profession’s ethical standards are also addressed with an emphasis on the ACA code of ethics and counselor ethical decision-making processes. *(Previously listed as PSYC 6705.)*

**COUN 6671 Counseling Practicum (3 cr.)**
The focus of this course is on the practicum, which is an essential component of applied professional training. Students complete supervised practicum experiences that total a minimum of 100 hours, allowing them to develop their counseling skills while under supervision. Students communicate with the class and the practicum faculty at least twice a week during the quarter to discuss cases and present videos of student-client sessions. This course has a required face-to-face residency. *(Prerequisite: Approval of the coordinator of field training)*

**COUN 6682 Counseling Internship (6 cr. — 3 cr. per term for 2 terms)**
The focus of this course is on the internship, which provides a supervised training experience that prepares students to successfully function in the role of a professional psychologist. Students complete a supervised internship of 900 hours. The internship provides an opportunity for students to perform, under clinical supervision, a variety of counseling activities that a professional counselor is expected to perform. Students communicate with the class and the internship faculty at least twice a week during the quarter to discuss cases and present videos of student-client sessions. This course has a required face-to-face residency. *(Prerequisite: COUN 6671 and approval of the coordinator of field training)*

**COUN 8720 Diagnosis and Assessment (5 cr.)**
This course is an overview of what is commonly referred to as abnormal psychology; however, what constitutes normalcy is considered from multiple perspectives. Students explore the application of diagnostic criteria in various mental health work settings, such as schools, rehabilitation facilities, community agencies, and private practices. Environmental and biological factors contributing to behavioral disorders are considered using the scholar-practitioner model. Techniques are reviewed for the diagnosis and treatment of cognitive, emotional, and developmental disorders, as well as for psychophysiological and psychosocial problems. Multicultural factors that complicate diagnosis are reviewed. *(Cross-listed with PSYC 8720.)*

**COUN 8722 Counseling and Psychotherapy Theories (5 cr.)**
This course summarizes the history and explores the primary concepts of the major approaches to counseling and psychotherapy in current use. The empirical foundations of each theory are examined, and examples are supplied showing how each method is applied to clients. Limitations of each approach are also explored. *(Cross-listed with PSYC 8722.)*

**COUN 8723 Multicultural Counseling (5 cr.)**
This course is designed to increase students’ awareness and knowledge of, and skills related to, multicultural counseling and the delivery of psychological services. Students explore diversity and identity issues and discuss their impact on the therapeutic relationship. The application of traditional theoretical orientations and current multicultural theories to culturally diverse groups is addressed. Topics include race and ethnicity, sex and gender, sexual orientation, social class, and age and ability. *(Cross-listed with PSYC 8723.)*
COUN 8726 Marriage and Family Therapy (5 cr.)
This course introduces students to theoretical perspectives and techniques, classical schools of thought, and recent developments in marriage and family therapy. Culture, gender, and ethnicity factors in family development are explored. Theoretical frameworks in marriage and family therapy, including psychosocial, psychodynamic, transgenerational, strategic, cognitive-behavioral, and social constructionist models, are reviewed and compared. The roles of culture, spirituality, and values in understanding families are explored. (Cross-listed with PSYC 8726.)

COUN 8728 Substance Abuse Therapies (5 cr.)
This course examines psychological aspects of addictions involving alcohol, prescription medications, and illegal substances. Current research in the field of dependency and addiction is explored. Topics include diagnosis, models of treatment, treatment planning, use of group and family treatment plans, and efficacy of treatment. Strategies to promote change, including the transtheoretical model of behavior change, are discussed. (Cross-listed with PSYC 8728.)

COUN 8753 Vocational Psychology and Counseling (5 cr.)
This course examines major career development theories, assumptions, and implications for practice. Career information programs and systems in terms of their application to personnel assessment, counseling, development, and placement are reviewed. Focus is placed on the implications of individual differences in cultural, gender, and age-related issues. Students obtain a theoretical and practical basis for supporting individuals in vocation selection and career development. (Cross-listed with PSYC 8753.)

COUN 8785 Prevention: Research and Practice (5 cr.)
This course provides an inquiry into prevention and intervention programs for individuals, groups, and communities. Students consider cultural, social, psychological, family, organizational, and political factors bearing on the mental health and development of people in various settings, including schools, communities, and organizations. Theoretical frameworks guiding prevention and intervention are explored, including constructivist and ecological-developmental perspectives. Students gain experience in developing prevention-oriented programs within diverse systems. (Cross-listed with PSYC 8785.)

EDAD

EDAD 6800 Facilitating Effective Learning for All Students (3 sem. cr.)
This course introduces research on learning and develops an understanding of how different approaches to instruction are informed by research. To move teaching to more effective strategies, leaders learn to explain how and why learner-centered teaching enhances the achievement of all students, and learn how to overcome resistance among staff, students, and parents.

EDAD 6801 Ensuring Quality Education for Students With Diverse Needs (3 sem. cr.)
This course focuses on effective, learner-centered instruction that uses diverse and inclusive approaches for students at risk, as educators help all students reach increasingly higher standards of performance.

EDAD 6802 Using Data to Strengthen Schools (3 sem. cr.)
This course focuses on data-driven decision-making and the critical skills necessary to meet the needs of all children and to reach accountability expectations. Special emphasis is placed on the definition of action for effective schools—continuing analysis of the gaps between goals for student learning and actual student performance.
EDAD 6803 Allocating Resources Strategically and Structuring the Organization for Learning (3 sem. cr.)
This course focuses on research about effective schools, to provide guidance on the most productive ways to organize resources: time, people, money, and technology. Students learn to develop strategies to define the most important priorities, the overall educational design, and the organizational structures that best match the needs for improvement.

EDAD 6804 Enhancing Teacher Capacity and Commitment (3 sem. cr.)
This course focuses on the central role of school leaders—building human resources, from recruitment through induction to continuing professional development. It also covers methods for dealing with continuing ineffectiveness among members of school staff.

EDAD 6805 Facilitating Productive Working Relationships and School Culture to Enhance Student Learning (3 sem. cr.)
This course addresses critical functions of the school leader, including developing consensus that promotes action (effective decision-making process, patterns of communication, conflict resolution strategies); infusing leadership throughout the school (collaborative structures and strategies); and establishing a personal, ethical, and moral platform for leadership.

EDAD 6806 Collaborating With Families and Communities for Student Success (3 sem. cr.)
In this course, students develop the capabilities needed to identify and enlist the support of parents, as well as organizations and public agencies that serve youth and families, in ways that align with school goals. Special attention is paid to these functions in multicultural schools and communities.

EDAD 6807 Creating Positive, Safe, and Effective Learning Environments (3 sem. cr.)
Students in this course learn to treat differences and conflicts as opportunities for learning the social competencies that are essential to civic participation and interpersonal effectiveness, in school and beyond. The importance of safe and orderly environments for learning, with school cultures based on mutual respect among students, teachers, and staff, is recognized.

EDAD 6808 Meeting the Literacy Challenge: Leading New Initiatives (3 sem. cr.)
Literacy is at the core of success—in school and in life. The emphasis of this course is on what has been learned about teaching and learning, student assessment, professional development, parental and community involvement, and other related topics. Issues of curriculum and the effects of district and state policies on school improvement are explored in greater depth.

EDAD 6809 Implementing Continuous School Improvement (3 sem. cr.)
This course focuses on theories of change, with an emphasis on leadership behavior that promotes positive change over time. Based on the context of systems thinking, students demonstrate what it takes to structure a school that is a learning organization.

EDAD 6810 Internship (6 sem. cr.)
This course provides students with authentic opportunities to apply what has been learned in courses and to expand what future educational leaders need to know and be able to do. The internship includes three components: practical applications of learning within courses, internship experiences while taking other courses, and development and evaluation of the Program Portfolio.

EDAD 8001 Foundations for Doctoral Study (6 sem. cr.)
Through a series of interrelated learning activities, this course provides an understanding of and practice in the foundational skills and strategies for success in the Ed.D. program. Four major topics are explored: (a) establishing a comfort level with online learning and interpersonal relations, confirming program
expectations, and planning for the successful completion of the program; (b) developing an understanding of the concept of constructivist leadership as represented in professional communities of learning; (c) demonstrating an understanding of critical-thinking and reading skills as evidenced in doctoral-level scholarly writing; and (d) analyzing and synthesizing current research as it leads to further inquiry. Students prepare a Doctoral Development Plan (DDP) and praxis (theory applied to practice) papers based on their individual professional interests and goals.

**EDAD 8011 Proseminar: Leading to Promote Learning (6 sem. cr.)**
The first Proseminar introduces leadership as a concept or construct rather than a position of authority. Students experience the concept of leadership by investigating the literature and analyzing real-life scenarios with a focus on student achievement. Students then apply the learning model to their own school scenario—by conducting pedagogical observations, interviewing colleagues, collecting data, reviewing the literature, and analyzing and reflecting on classroom/school practices in order to make a decision focused on equity and excellence of student achievement. The first comprehensive paper investigates a topic of personal interest related to professional leadership, theories and research about learners, and/or theories and research about instructional or curriculum practices.

**EDAD 8015 Research Approaches (6 sem. cr.)**
Educational leaders need to be well-informed about current developments in their fields of expertise. This course addresses the role of research in generating and testing theory, as well as in solving problems and making decisions. It emphasizes the importance of integrity in research and how to study human subjects responsibly and ethically. A variety of research approaches, research methodologies, and research designs are explored. The components of research design are examined, and students evaluate research for quality of design. Construction of questions for inquiry is explored.

**EDAD 8021 Proseminar: Leading Communities of Practice (6 sem. cr.)**
The second Proseminar expands the role of leadership from the classroom and school to the larger educational community. The course focuses on the development of knowledge, abilities, and dispositions necessary for the effective, participative, and productive leadership needed for sustainable education reform. Topics covered in this course include creating professional partnerships, participating in collegial study teams, facilitating professional development of other educators, and adeptly using collegial and collaborative processes such as coaching and mentoring teachers and other leaders. An additional focus is on the relationship between the school and community stakeholders. The second comprehensive paper probes learning, teaching, and leading as the educator acts to influence the educational community through professional discourse and analytical reflection on investigations into the roles and practices of effective, inquiry-oriented school leadership. Legal, business, and/or political perspectives implications of these educational issues are investigated.

**EDAD 8025 Quantitative Research (6 sem. cr.)**
This research course is designed to provide an understanding and working knowledge of key quantitative data collection and analysis concepts. It approaches statistics from a problem-solving perspective with emphasis on selecting appropriate statistical techniques for various research designs and on interpreting and reporting findings. The important outcome is that each doctoral student will have an understanding of quantitative data analysis and be competent in reading, discussing, and applying statistical concepts and data results from quantitative studies.

**EDAD 8031 Proseminar: Leading for Social Change (6 sem. cr.)**
Leaders reach out to a larger community to discourse, question, and learn about issues and forces affecting teaching and learning in national and international schools. The focus of this Proseminar is to expand the educational leader’s capacity for positive social change through reciprocal relationships with professional learning communities and initiatives related to quality education outcomes. Partnerships with
community stakeholders, educational institutions, and other advocacy groups are studied in order to
develop and refine the educator’s ability to advocate for productive education policy at the local, state,
national, and/or international levels. The comprehensive paper focuses on inquiry related to educational
issues affecting quality schooling practices for K–12 and adult learners. Legal, business, and/or political
perspectives implications of these educational issues are investigated.

**EDAD 8035 Qualitative Research (6 sem. cr.)**
This course explores the constructs and processes used in qualitative research studies. It provides practice
in formulating qualitative questions related to problems encountered by teachers, identifying appropriate
qualitative methods, and selecting study participants. Students practice constructing data collection
protocols for interviews and observations. Students practice document analysis and apply coding and
classification techniques for organizing and interpreting data. Techniques for ensuring the trustworthiness
of qualitative findings are also explored. The important outcome is that each doctoral student will have an
understanding of qualitative data analysis and will be competent in reading, discussing and applying
statistical concepts and data results from qualitative studies.

**EDAD 8090 Doctoral Study Intensive (12 sem. cr.— 6 sem. cr. per term for 2 terms)**
The doctoral study demonstrates a student’s scholarly talents to examine, critique, and synthesize
knowledge so that new ideas can be tested; best practices identified, established, and verified; or
theoretical or policy constructs evaluated and advanced. In all cases, the doctoral study is to be a rigorous,
original inquiry that results in new knowledge, demonstrating its efficacy in the world of practice. The
goal of the doctoral study is for the educational leader to conduct an investigation that focuses on
learning, teaching, and leading within a designated community. *The last two semesters of the degree
program are dedicated to the Doctoral Study Intensive.*

**EDUC**

*Note: Courses listed with a D prefix in parentheses are delivered electronically by the Indiana University
(IU) School of Continuing Studies and are cross-listed as Walden University courses (EDUC prefix).
Students register through Walden University using EDUC course numbers. These courses are offered on
the IU semester academic calendar.*

**EDUC 6000 Success Strategies in the Online Environment (non-credit)**
This is an orientation to the Middle Level Education master’s program. Internet tools, email, electronic
mailing lists, Web browsers, and other critical tools and skills for success in a distance-learning
environment are covered.

**EDUC 6510 Young Adolescent Development and Implications in a Global Society (3 sem. cr.)**
Students gain understanding of early adolescence in contemporary society and knowledge of the social,
emotional, physical, intellectual, and moral development of early adolescence. Students apply major
concepts, principles, theories, and research in teaching and interactions with young adolescents.

**EDUC 6520 Organizational Structures for High-Performing Middle Grades Schools (3 sem. cr.)**
This course covers the major concepts, principles, theories, and research on which current middle level
education is based. The course content considers philosophical foundations and essential components of
middle level education used in a variety of school settings. Emphasis is placed on team teaching for
improving student outcomes, including varied use of time within the school, team, and classroom.
EDUC 6525 Concepts of Technology (3 sem. cr.)
This course provides an overview of educational technology for classroom integration based on current literature and research. The overview includes (a) evaluation of educational technologies to attain learning goals; (b) development of lesson plans or units based on Bloom’s Taxonomy; and (c) selection of appropriate software applications, programs, or support materials. Topics include criteria and analysis for selecting educational software, correct uses of various activities in educational software to improve the learning process, and research methods using the Internet.

EDUC 6530 The Middle Grades Curriculum Continuum (3 sem. cr.)
This course covers the curriculum of middle school and the process by which it is designed, integrated, implemented, and evaluated. Students learn major concepts, principles, theories, models, standards, and research related to middle level curriculum to use in their classrooms.

EDUC 6540 Pedagogy and Exemplary Practices for Learning in the Middle Grades (3 sem. cr.)
Current pedagogical theories, instructional strategies, and best practices for teaching young adolescents in middle grades are the focus of this course. Also highlighted are best practices in teaching applied in the context of previous learning regarding characteristics of young adolescents and effective middle level schools.

EDUC 6550 Assessment and Evaluation as Tools for Student Success (3 sem. cr.)
Students investigate and evaluate the theory of middle level assessment. They also research, create, and evaluate methods of assessment and evaluation for the middle level classroom. Students acquire comprehensive understanding of major concepts, principles, theories, and research related to middle level assessment. They apply knowledge in the classroom, school, and community. Emphasis is on performance assessment and evaluation strategies, rubrics, and Multiple Intelligence Theory.

EDUC 6560 Middle Level Professional Roles (3 sem. cr.)
This course focuses on the application of theory to practice and the development of each student as a middle level professional. Students prepare their culminating portfolio, consider their professional development needs and their role as a middle level advocate, and engage in analyzing a prospective “School to Watch.”

EDUC 6561 Mathematics for Middle Level Teachers (3 sem. cr.)
This course is designed to increase the content knowledge of middle level teachers while increasing their understanding of how middle level students best learn mathematics.

EDUC 6562 Understanding and Teaching the Language Arts (3 sem. cr.)
This course focuses on principles and content standards defined and described by the National Council of Teachers of English (NCTE) and the International Reading Association (IRA). It assumes content of the English language arts cannot be “separated from the purpose, development, and context of language learning.” It presumes that English language arts should be taught in a manner consistent with the constructivist view of learning and teaching within a culturally diverse and global society.

EDUC 6563 Science for Middle Level Teachers (3 sem. cr.)
This course is designed to increase the content knowledge of middle level teachers while increasing their understanding of how middle level students best learn science.

EDUC 6564 Understanding and Teaching the Social Studies (3 sem. cr.)
This course covers the principles and standards underlying essential characteristics of “powerful social studies” described by the National Council for the Social Studies (NCSS, 1997). It assumes social studies
should be taught in a manner consistent with the constructivist view of learning and teaching within a culturally diverse and global society.

**EDUC 6565 Arts Education for the Middle Level Educator (3 sem. cr.)**
This course focuses on basic knowledge and skills in the arts. Each arts discipline adds richness to the learning environment. There is instruction with, through, and about music, dance, drama, and visual arts, including how to weave the arts through the middle level curriculum.

**EDUC 6610 Teacher as Professional (3 sem. cr.)**
This course encourages teachers to engage in introspection and reflection and to develop skills that will enable them to perform at peak levels. Teachers acquire and model positive attitudes and problem-solving techniques. They learn strategies to promote social responsibility, respect, and cooperation among students, and they learn how to build these strategies into daily lessons and activities.

**EDUC 6615 Effective Teaching Using Learning Styles and Multiple Intelligences (3 sem. cr.)**
This course expects teachers to design effective instruction to enable all students to learn. Two learning models, learning styles, and multiple intelligences are explored and integrated into instruction, curriculum, and assessment.

**EDUC 6620 Collaborative Action Research (3 sem. cr.)**
This course provides a foundation for educators to become primary managers of classroom research. Acting as teacher-researchers and colleague-coaches, educators move from isolated instruction to instruction that is enhanced by collaboration with colleagues. Methodology for sequencing tasks—beginning with problem formulation, data collection from numerous sources, analysis, and action planning—is covered.

**EDUC 6625 Habits of Mind: Thinking Skills to Promote Self-Directed Learning (3 sem. cr.)**
This course helps teachers develop skills and strategies to prepare students for living and learning productively in today’s society. Teachers learn how to help students manage, motivate, and modify their own learning as a continuing, lifelong process.

**EDUC 6630 Instructional Models and Strategies (3 sem. cr.)**
This course introduces several models of instruction that are foundational for building an effective teaching practice that meets diverse learning needs. These research-based models work in concert with each other to evoke different types of thinking processes in students, providing opportunities for higher-level learning and achievement. Strategies are presented for designing curricula, instructions, and assessments that integrate and balance these models.

**EDUC 6635 Classroom Management to Promote Student Learning (3 sem. cr.)**
This course explores the relationships between behavior management, classroom instruction, and student learning. Teachers learn foundational principles and strategies for preventing behavior problems. They learn to establish classroom rules and procedures and to enlist parent support for their behavior-management efforts. A framework for fostering cooperation, social skills, and a sense of community in the classroom is presented, and guidelines for teaching conflict resolution and peer mediation are included.

**EDUC 6641 Foundations of Reading and Literacy Development (3 sem. cr.)**
Designed to respond to the challenge of promoting higher levels of literacy and achievement for all students, this course provides teachers with the background knowledge to help them understand the topics and issues relevant to reading instruction. It explores both historical and contemporary perspectives on the teaching of reading, and it covers the basic tenets of a balanced approach to literacy instruction.
EDUC 6642 Strategies for Literacy Instruction, Part I (3 sem. cr.)
This course covers research-based basic skills and strategies for reading instruction: word knowledge, phonemic awareness, phonics, vocabulary, and fluency.

EDUC 6643 Strategies for Literacy Instruction, Part II (3 sem. cr.)
This course covers research-based basic skills and strategies for reading instruction: prior knowledge; metacognition; reading as a constructive process; active-reading behaviors; comprehension before, during, and after reading; guided reading; and integrating reading and writing.

EDUC 6644 Supporting the Struggling Reader (3 sem. cr.)
This course introduces informal diagnostic tools to identify students experiencing reading difficulties. Research-based intervention programs are discussed. Guidelines for communicating with parents and the school community regarding students’ reading difficulties are provided. Students conduct a case study as practical experience in diagnosing and reporting student reading difficulties.

EDUC 6645 Planning and Managing the Classroom Literacy Program (3 sem. cr.)
This course covers planning, organizing, and managing a balanced literacy program. It covers flexible grouping for differentiating instruction, time management, instructional pacing, and transitions.

EDUC 6652 Listening to Children’s Ideas (3 sem. cr.)
Participants explore children’s ideas of force and motion by planning and carrying out clinical interviews with children. Through the interviewing experience, participants increase their ability to set aside their own ideas and expectations and attend to children’s ideas. They elicit information from the children about what they think and then analyze interview findings to expand their understanding of how children perceive the world around them.

EDUC 6654 Classroom Facilitation (3 sem. cr.)
Participants consider how to help students develop scientific ideas and skills through inquiry. They study video clips of teachers facilitating classroom science to learn strategies for extending students’ experience and scaffolding scientific ideas. In classrooms, they try various facilitation and questioning strategies. Each participant creates a collection of teaching strategies that promote inquiry accompanied by classroom examples.

EDUC 6656 Curriculum Designed for Understanding (3 sem. cr.)
The aim of this course is to provide a framework for thinking critically about how to craft inquiry-based experiences that result in deeper understanding of important science concepts. The framework of Teaching for Understanding, developed at Harvard University, is central to the course. Participants keep the following questions in mind as they think about curriculum: What topics are worth understanding? What must students understand about these topics? How can understanding be fostered? How can we tell what students understand?

EDUC 6658 Formative Assessment: Assessment for Learning (3 sem. cr.)
The focus of this course is assessment to support learning. Through classroom case studies, introductory readings, and discussions, participants make a distinction between the different purposes of assessment (principally formative and summative). They identify formative assessment as part of teaching, always aimed at advancing learning, not at labeling or grading it. Participants experience and reflect on ways of assessing inquiry skills and conceptual understanding, the importance of self- and peer-assessment, and the provision of feedback to learners on their progress. The course culminates in participants planning formative assessment into inquiry-based classroom experiences for students.
EDUC 6660 Investigating Equitable Classrooms (3 sem. cr.)
In this course participants broaden their understanding of the scope and dimensions of equity in science education through reflection, reading, classroom research, debate, and discussion. Participants learn to do independent classroom research and design and conduct a research project that includes collecting classroom data to answer a question about equity. They plan classroom actions based on their research findings to ensure that all students are successful in reaching higher levels of achievement.

EDUC 6661 Exploring New Technologies: The Impact on Society, Work, and Education (3 sem. cr.)
This course provides the theoretical setup for why technology and learning is both a timely and important topic. It covers a brief history of educational technology, the communication revolution, the impact of this revolution on society, what this means for schools, the impending paradigm shift for the teacher, the need to develop students as critical consumers of information and constructors of knowledge, and the development of a new, fuller sense of literacy.

EDUC 6662 Multimedia Tools: How to Research, Plan, and Communicate With Technology (3 sem. cr.)
In this course, teachers begin to develop their understanding of and proficiency with technology on a personal and professional level. The course focuses on learning how to effectively use several key tools, which teachers will later be able to build upon and use in their classrooms. Teachers learn how to use software tools such as word processors, spreadsheets, presentation programs, and image editors. They also explore online tools, such as email, listservs, electronic publications, and Web sites.

EDUC 6663 Integrating Technology in the Curriculum, Part I (3 sem. cr.)
This course guides teachers in exploring the use of technology with their students. The shift in pedagogy introduced in EDUC 6661 is further explored, with particular focus placed on how technology can support multiple modes of learning. Teachers investigate specific models for integrating the Internet into their curriculum, including WebQuests, telecollaborative projects, Internet workshops, and research or inquiry projects. After exploring and evaluating ready-made examples of each, teachers try their hand at designing their own.

EDUC 6664 Integrating Technology in the Curriculum, Part II (3 sem. cr.)
This course continues the exploration of technology in the classroom, with a focus on its use in the standards-based environment. Teachers learn how to design technology-infused projects that help students meet specific curricular standards. They explore the use of technology in assessment, including software that helps align curricula to standards and facilitates the grading and reporting process. They explore how to manage technology in the classroom, including the need to work with limited resources, varying skill levels, and differentiated instruction.

EDUC 6665 Technology, Leadership, and a Vision for the Future (3 sem. cr.)
This course prepares teachers to become agents of change beyond their classrooms in the field of technology and learning. They consider how to develop grants, manage a technology budget, and provide leadership within their districts. The course poses issues to be addressed, explores roadblocks to maneuver past, and provides troubleshooting advice. Teachers use and evaluate a variety of software and hardware tools to determine which are essential to have on hand in every classroom and on every school campus. For example, software for multimedia authoring, concept mapping, and “office” productivity are explored. Likewise, instructional use of hardware tools such as digital cameras, PDAs, and investigative probes are investigated. Finally, the course explores promising trends for the future, such as individualized instruction through the use of technology and virtual schools.

EDUC 6671 Designing Curriculum, Instruction, and Assessment, Part I (3 sem. cr.)
This course introduces curriculum, instruction, and assessment in the context of standards and
accountability and their relationships to student learning. Teachers explore interrelationships among curriculum, instruction, and assessment: the importance of alignment, connection to learning theory and learner variables, and need for differentiation to meet diverse student needs. Teachers examine and make sense of their academic standards and investigate the history, roles, and types of curricula and instruction. Teachers analyze, evaluate, modify, and/or design curriculum and instruction for specific content and purposes.

**EDUC 6672 Designing Curriculum, Instruction, and Assessment, Part II (3 sem. cr.)**
This course examines the history, purposes, and methods of assessment and explores curriculum, instruction, and assessment implementation issues. Teachers analyze, evaluate, modify, and/or design assessments for specific content and purposes. They align assessments to curriculum and instruction as part of the design of instructional units and lessons. Methods of record keeping, grading, and reporting; use of assessment data; and test preparation are presented; and implementation issues related to accountability, planning, and collaboration are addressed.

**EDUC 6673 Literacy and Learning in the Information Age (3 sem. cr.)**
This course redefines literacy to include the access, evaluation, understanding, and application of information available in print and nonprint resources. Processes and strategies for integrating literacy when designing curriculum, instruction, and assessments are presented. Teachers learn to develop their own and their students’ literacy skills (listening, speaking, reading, writing, viewing, and visually representing) via traditional and contemporary information technologies, such as the Internet, software programs, and multimedia tools.

**EDUC 6674 Designing Curriculum, Instruction, and Assessment for Students With Special Needs (3 sem. cr.)**
This course emphasizes the need for all students, including students with special needs, to achieve high academic standards. It examines the learning challenges of students who by definition of federal law have disabilities, as well as those of students who have significant difficulty with learning but do not qualify for special education services. Teachers learn how to adapt curriculum, instruction, and assessment to maximize learning for students with special needs.

**EDUC 6677 Designing Curriculum and Instruction (3 sem. cr.)**
This course introduces curriculum, instruction, and assessment in the context of standards and accountability and their relationships to student learning. Teachers explore interrelationships among curriculum, instruction, and assessment: the importance of alignment, connection to learning theory and learner variables, and need for differentiation to meet diverse student needs.

**EDUC 8000 Foundations for Doctoral Study (6 sem. cr.)**
Through a series of interrelated learning activities, this course provides understanding and practice of the basic skills and strategies for success in the Ed.D. program. Teacher leadership is the focus of the investigative scholarship. Scholarly analysis includes exhibiting critical-thinking and library skills. Professional writing—using the conventions of scholarly writing and a personal, professional style and voice—is expected in the products of the course. Students prepare a Doctoral Development Plan (DDP) and praxis papers within their field of primary concentration.

**EDUC 8010 Proseminar: Leadership in Teaching and Learning (6 sem. cr.)**
The first Proseminar introduces the concept of teacher leadership with an emphasis on leadership as a concept or construct rather than a position of authority. Teachers experience the concept of leadership through investigation and analysis of instructional performance. Pedagogical observation, reflective practice, and analysis of classroom practice focus on inquiry and research-based methods in which teachers exemplify teaching for understanding. The first comprehensive paper investigates professional
learning, research-based instructional practices, constructivist methodology, and the quality of the
educator’s reflective practice and self-study of teaching that focuses on the relationships between
instructional theory, practice, and students’ learning and achievement.

**EDUC 8015 Research Approaches (6 sem. cr.)**
Teacher-leaders need to be well-informed about current developments in their fields of expertise. This
course addresses the role of research in generating and testing theory, as well as in solving problems and
making decisions. It emphasizes the importance of integrity in research and how to study human subjects
responsibly and ethically. A variety of research approaches, research methodologies, and research designs
are explored. The components of research design are examined, and students evaluate research for quality
of design. Constructions of questions for inquiry are designed and analyzed.

**EDUC 8020 Proseminar: Teacher Leadership in the School (6 sem. cr.)**
The second Proseminar expands the role of teacher leadership from the classroom to the school
community. The course focuses on the development of knowledge, abilities, and dispositions necessary
for effective and productive leadership in effecting professional partnerships, participating in collegial
study teams, facilitating professional development of other educators, and adeptly using collegial and
collaborative processes such as coaching and mentoring. The second comprehensive paper probes
learning, teaching, and leading as the educator acts to influence the school community through
professional discourse and analytical reflection on investigations into the roles and practices of effective,
inquiry-oriented school leadership.

**EDUC 8025 Quantitative Research (6 sem. cr.)**
This research course is designed to provide an understanding and working knowledge of some of the key
quantitative data collection and analysis concepts. It approaches statistics from a problem-solving
perspective with emphasis on selecting appropriate statistical techniques for various research designs and
on interpreting and reporting findings. The important outcome is that doctoral students will have an
understanding of quantitative data analysis and feel comfortable reading and discussing statistical
concepts and data results from quantitative studies.

**EDUC 8030 Proseminar: Teacher Leadership Beyond the School (6 sem. cr.)**
Teacher-leaders reach out to a larger community to discourse, question, and learn about issues and forces
affecting teaching and learning in American schools. The focus of this Proseminar is to influence capacity
by promoting and nurturing reciprocal relationships with professional learning communities and
initiatives related to quality education outcomes. Processes for creating and supporting partnerships with
community stakeholders, educational institutions, and other advocacy groups are studied to develop and
refine educators’ abilities to collaborate with decision-makers in the advocacy for public policy at the
local, state, or national level. The comprehensive paper focuses on inquiries related to significant and
important educational issues related to effecting quality schooling practices for K–12 learners.

**EDUC 8035 Qualitative Research (6 sem. cr.)**
This course explores the constructs and processes used in qualitative research studies. It provides practice
in formulating qualitative questions related to problems encountered by teachers, identifying appropriate
qualitative traditions, and selecting study participants. Students practice constructing data collection
protocols for interviews and observations. Students also practice document analysis and apply coding and
classification techniques for organizing and interpreting data. Ways to ensure the trustworthiness of
qualitative findings are explored.

**EDUC 8090 Doctoral Study Intensive (12 sem. cr. — 6 sem. cr. per term for 2 terms)**
The doctoral study demonstrates students’ scholarly talents to examine, critique, and synthesize
knowledge so that new ideas can be tested; best practices identified, established, and verified; or
theoretical or policy constructs evaluated and advanced. In all cases, the doctoral study is a rigorous, original inquiry that results in new knowledge, demonstrating its efficacy in the world of practice. The goal of the doctoral study is for the teacher-leader to conduct an investigation that focuses on learning, teaching, and leading within a designated community of practice. Ultimately, every doctoral study will make a fresh contribution to the field of practice in professional education.

**EDUC 8428 Research Seminar II: Design in Educational Research (5 cr.)**
This course introduces research types, research methodologies, and research designs typically used in educational research. The role of research in generating and testing theory, as well as in solving problems and making decisions, is explored, and the importance of ethics in research is emphasized. Basic, applied, action, and other research types are defined, exemplified, and critiqued. Students differentiate between qualitative and quantitative research methodologies, explain variations within each methodology, and apply qualitative and quantitative methodologies to research problems. The components of research design are developed, and students evaluate research for quality of design. Students apply their acquired knowledge by producing a research prospectus that exemplifies sound research planning and rigorous application of ethical principles. *(Prerequisite: SBSF 8417.)*

**EDUC 8438 Research Seminar III: Quantitative Research in Education (5 cr.)**
This course is designed to provide an in-depth understanding and working knowledge of quantitative data analyses. Students use statistical techniques (descriptive and inferential) to summarize data collected, to make comparisons of data sets, and to generalize results obtained for a sample back to the population from which the sample was obtained. Knowledge about data analyses helps a researcher interpret data and obtain meaningful insights about the problem being investigated. This course approaches statistics from a problem-solving perspective with emphasis placed on selecting appropriate statistical techniques for various research designs and on interpreting and reporting data analyses results. Computer data analysis (using SPSS) is a primary focus of the course, to enhance the use and interpretation of statistics in research. The important outcome is that doctoral students will have an understanding of quantitative data analysis and feel comfortable reading and discussing statistical concepts and data results from peer-reviewed and refereed studies. *(Prerequisite: EDUC 8428.)*

**EDUC 8448 Research Seminar IV: Qualitative Research in Education (5 cr.)**
In this course students explore the logic and execution of qualitative research studies. They gain in-depth practice in formulating qualitative questions related to problem statements, identifying appropriate qualitative traditions, and defining the criteria for selecting study participants. Students construct data collection protocols for interviews, observations, and document analysis. To achieve the aim of complete, detailed description, students practice organizing and analyzing data through classification and coding. Means of achieving objectivity in interpretation, such as triangulation and bracketing, are discussed. Ethical treatment of subjects, something that requires careful consideration in qualitative studies, is explored through vignettes of various ethical dilemmas. While not usually generalizable to a large population, qualitative studies must make a useful contribution to scholarly knowledge and social change: ways to do this will be discussed. *(Prerequisite: EDUC 8428.)*

**EDUC 8458 Advanced Research: Conducting Pilot and Field Studies (5 cr.)**
Pilot studies are useful for determining the adequacy of research procedures, including reliability and validity of instruments, observational techniques, interview procedures, and the degree to which the design captures the intended outcomes or effects. The benefit of pilot and field studies is the practice one receives prior to investing time and money in a larger scale research project. The intent of this course is to provide students with an opportunity to gain experience with the research methodology, method, and instruments that will be used in their dissertation. In addition to implementing the research design and analyzing the data, students critique the design for flaws as well as strengths. *(Prerequisites: EDUC 8438, 8448.)*
EDUC 8468 Advanced Research: Communicating Knowledge in Educational Research (4 cr.)
Researchers are obligated to communicate the results of their research. In this course, students produce research articles based on the pilot/field studies they’ve conducted. Articles should conform to the guidelines for publication in relevant scholarly journals. The intent of the course is for students to practice their skills in transmitting the results of their scholarly inquiry to the community of scholars. (Prerequisite: EDUC 8458.)

EDUC 8801 Educational Law, Public Policy, and Political Systems (4 cr.)
This course covers an overview of the interconnections and impact of educational policy, politics, and law upon student welfare, ethical decision-making, equitable distributions of rewards and sanctions, and community relations in a diverse, global environment. Students synthesize these domains within the theoretical and problem-based context of political environments, organizational structures, policy research, legal mandates, institutional climate, culture, diversity, and local, state, and federal influences. Selected topical readings and case studies bridging policy management, political strategies, and statutory and regulatory standards are covered.

EDUC 8802 Supervision, Evaluation, and Human Resources in Education (4 cr.)
This course covers the role of the educational leader in human resource management in schools and school districts. Emphasis is on the assumptions that underlie the human resource leader’s functions and behavior, the forces influencing the implementation of those functions, and the evaluation of contemporary professional development, supervisory, and personnel evaluation models, strategies, and methods. It also focuses on strategic planning in human resource development and school effectiveness and its relationship with the school system. The course also covers development of a model for supervision and evaluation of a human resource development program.

EDUC 8803 Student Personnel Services (4 cr.)
This course covers the legal, organizational, and ethical foundations of school leadership practices in student personnel affairs and services. It explores administrative practices in educational programming, staff and student personnel functions, community relations, and communication. Students develop an awareness of the global and diverse nature of school communities and best practices in providing student services that meet district needs. The course also covers educational goal setting, program planning, development, implementation, and evaluation of student-related activities and enhancements.

EDUC 8804 School Financial Management (4 cr.)
This course provides a theoretical and practical examination of issues in school financial management with an emphasis on budgeting, budget construction, purchasing, financial planning, school-site and facilities material management, and management of capital outlay programs. It gives an overview of revenue sources; federal, state, and local allocations systems and tax configurations; cost-benefit relationships; and operational finance. Students consider the social, economic, legal, and political aspects in the allocation of tax dollars for public school financing.

EDUC 8805 Reflective Instructional Practice (4 cr.)
Central to this course are the construction of a framework for instructional decision-making and the development of reflective strategies for continuous instructional improvement. The course investigates decisions teachers make in designing effective instruction and examines various planning models. Emphasis is on analyzing and improving instruction using reflective critique.

EDUC 8806 Educational Measurement and Evaluation (4 cr.)
In this course, students learn how to measure and evaluate student learning outcomes and educational programs. They also examine the purposes for collecting student achievement data and acquire key
evaluation concepts and examine the distinctions among various approaches to assessing learning. Knowledge and skills are applied by critiquing and developing measurement instruments.

**EDUC 8807 Curriculum Theory and Design (4 cr.)**
Students explore curriculum theory and design at the district or departmental level. Theoretical foundations of curriculum are applied to solving curricular problems and analyzing curriculum artifacts with emphasis on the theoretical, practical, and political complexity of curriculum work.

**EDUC 8811 Practicum in K–12 Leadership (9 cr.)**
A school-site or agency-based practicum provides opportunities for advanced doctoral students to participate in and complete an applied leadership project or activity under the direction and supervision of an on-site administrator and Walden practicum supervisor. Students apply theoretical educational leadership constructs to the critical problems, issues, and activities faced by school and/or agency leaders in the workplace. Students must demonstrate competency in each of three specified areas—professional development and human resources, interpersonal relations, and technology and information systems—with an additional specialization area selected by the student based on identified career goals. (Prerequisites: EDUC 8801, 8802, 8803.)

**EDUC 8812 Critical Survey of Technology (4 cr.)**
This course focuses on current and emerging innovative technologies that affect and enhance the learning environment for students. Included is a discussion of topics affecting learning environments, such as cultural/equity issues, computer crime, computer security, computer games versus educational software, online learning, graphics versus text, accuracy of information on the Internet, pornography, and assistive/adaptive learning. Students critically evaluate an educational software package, an online learning infrastructure, and software used for drill/practice, tutorial, simulation, and problem-solving—sharing titles of software and Web sites used in their content area.

**EDUC 8813 Management of Technology for Education (4 cr.)**
This course explores issues that deal with integrating and managing technology in education. Areas such as leadership, strategic planning, systems acquisition, coordination, and implementation, as well as the impact of managing technology and its implications for teaching, learning, and administrative functions are studied. Policies that impact human resource development, staff development, information access, security, management control, and evaluation are also discussed in this course.

**EDUC 8814 Learning Theories and Instructional Technology (4 cr.)**
Students explore the connection between principal theories of human learning including behaviorism, cognitive information processing, and constructivism as applied to the pedagogy of effective instruction. The focus of this course is on instructional interventions and their potential improvement through the application of technology.

**EDUC 8823 Computer Technology and Multimedia in Education (4 cr.)**
In this course, emerging computer-based multimedia innovations and applications are examined. Students learn about software, courseware, presentation devices, output devices, and mass storage devices for course delivery using instructional technology. Students evaluate various authoring systems in either Windows or Mac environments to identify strengths and weaknesses. They learn instructional design principles and demonstrate the ability to produce simple but effective multimedia presentations using a multimedia authoring program.

**EDUC 8824 Integration of Technology in the Curriculum (4 cr.)**
This course covers how to create curriculum materials and courses that integrate technology allowing for access to new information, development of new learning skills, and the empowerment of students. It also
covers learning styles and the student as the center of learning and explores the role of technology and its incorporation within the learning curriculum for students and teachers.

**EDUC 8825 Course Development and Delivery Utilizing Technology (4 cr.)**
This course analyzes instructional design principles and procedures, including needs assessment, objectives, and criterion test design. It covers the development of guidelines to inform decision-making processes that accompany the design, development, production, utilization, and evaluation of course materials that use computer-based and other technologies. Students create a development proposal, then design and develop an instructional Web site complete with online assessments, utilizing DreamWeaver and Coursebuilder. Familiarity with this software is not a prerequisite; students who are unfamiliar with these tools can take tutorials provided by Macromedia.

**EDUC 8826 Planning and Implementing Instructional Technological Environments (5 cr.)**
This field-based experiential course prepares educators as leaders in developing policies and procedures, planning and budgeting, implementing, and administering instructional technology environments. Students focus on the theoretical and practical considerations for researching, planning, configuring, evaluating, and administering facilities and resources in their own instructional settings. The five credits include a one-credit practicum.

**EDUC 8883 Practicum in Community College Leadership (9 cr.)**
Students may elect to take an on-site practicum working under the mentorship of a community college leader instead of the advanced research seminars. Mentors should be exemplary community college leaders in roles similar to those the students are preparing to enter. The general objective of the practicum is to provide students with the opportunity to learn by listening, discussing, questioning, observing, participating, and contributing in a leadership role while working with a mentor/supervisor. Students are expected to participate in the work of the site supervisor for 120–180 hours, usually over a 12-week period.

**HLTH**

**HLTH 8427 Research Seminar II: Design in Health Services Research (5 cr.)**
This course explores demographic, biometric, epidemiologic, health econometric, health operations, and evaluation/outcome-based research. Topics include theory and hypothesis testing; variable definition and measurement; correlational, survey, experimental, quasi-experimental, nonexperimental, factorial, and single-subject designs; cross-sectional, case-control, prospective, clinical trials; and technology assessment. The language, logic, and execution of qualitative designs are examined, and the interfacing of qualitative and quantitative designs is discussed. *(Prerequisites: SBSF 8417 and two core KAMs.)*

**HLTH 8437 Research Seminar III: Data Analysis in Health Services Research (5 cr.)**
This course covers description statistics; statistical inference; and quantitative techniques, including analysis of variance and covariance, multiple linear regression, and nonparametric techniques. Other topics include software for data analysis; qualitative data reduction, data displays, and conclusion drawing/verification; data management techniques; and interfacing qualitative and quantitative data for analysis. *(Prerequisites: SBSF 8417, HLTH 8427, two core KAMs, and successful completion of a Research Seminar III intensive seminar at an academic residency.)*
**HLTH 9000 Dissertation Research (30 cr. total)**
This course sequence offers doctoral students the opportunity to integrate their program of study into an in-depth exploration of an interest area that includes the completion of a research study. Students complete the dissertation independently, with the guidance of a dissertation supervisory committee chair and committee members. Students complete a prospectus, proposal, institutional review board application, and dissertation. *(Prerequisites: For the General Program and for the Health Management and Policy specialization, students must first complete the core Knowledge Area Modules (KAMs I, II, and III), SBSF 8417, HLTH/HUMN/PUBH 8427 and appoint their dissertation supervisory committee. For the Community Health Promotion and Education specialization, student must first complete two Knowledge Area Modules (KAMs), SBSF 8417, HLTH/HUMN/PUBH 8427, and the public health 6000-level courses.)*

**HUMN**

**HUMN 8427 Research Seminar II: Design in Human Services Research (5 cr.)**
This course explores the philosophy of science and social science. Topics include the construction, use, and verification of concepts, models, and theories; an introduction to qualitative and quantitative frameworks for inquiry; and ethical, social, and political aspects of knowledge production. *(Offered fall and spring quarters. Prerequisites: SBSF 8417 and two core KAMs.)*

**HUMN 8437 Research Seminar III: Data Analysis in Human Services Research (5 cr.)**
This course covers descriptive statistics; statistical inference; and quantitative techniques, including analysis of variance and covariance, multiple linear regression, and nonparametric techniques. Other topics include software for data analysis; qualitative data reduction, data displays, and conclusion drawing/verification; data management techniques; and interfacing qualitative and quantitative data for analysis. *(Offered winter and summer quarters. Attendance at a designated Walden residency is required. Prerequisites: SBSF 8417, HUMN 8427, and two core KAMs.)*

**HUMN 9000 Dissertation (30 cr.)**
An independent research inquiry in Human Services. *(Prerequisites: Core KAMs, SBSF 8417, HUMN 8427, and appointment of an approved dissertation supervisory committee.)*

**MATH**

**MATH 6571 Number and Operations, Grades 6–8 (3 sem. cr.)**
Teachers develop their own understanding of foundational mathematics concepts by focusing on numbers and operations, including number relations, integers, fractions, decimals, and percentages. The National Council of Teachers of Mathematics (NCTM) Process Standard of representation and the use of manipulatives in mathematics instruction are included.

**MATH 6572 Geometry and Measurement, Grades 6–8 (3 sem. cr.)**
Teachers develop their own understanding of geometry and measurement, focusing on such topics as classifying, defining, and comparing two- and three-dimensional geometric shapes; measuring angles and using ratio and proportion to solve problems involving scaling and similarity; and exploring area,
perimeter, surface area, and volume. The NCTM Process Standards of problem solving and communication are included.

**MATH 6573 Algebra, Grades 6–8 (3 sem. cr.)**
Teachers develop their own understanding of algebra, focusing on topics such as patterns, relations, functions, coordinate pairs and graphing, and equations and inequalities. The NCTM Process Standard of making connections between mathematics concepts, real-world applications, and other disciplines is included.

**MATH 6574 Data Analysis and Probability, Grades 6–8 (3 sem. cr.)**
Teachers develop their own understanding of data analysis and probability, focusing on such topics as collecting, organizing, and displaying data; using appropriate statistical methods to analyze data; and understanding and applying basic concepts of probability. The NCTM Process Standard of reasoning and proof is included, along with integrating technology and ensuring equity in a standards-based mathematics classroom.

**MATH 6681 Elementary Mathematics: Number and Operations (3 sem. cr.)**
Teachers develop their own understanding of foundational mathematics concepts by focusing on numbers and operations, including the base-ten numeration system, fractions, equivalence, and computational fluency. The NCTM Process Standard of representation and the use of manipulatives in mathematics instruction are included.

**MATH 6682 Elementary Mathematics: Geometry and Measurement (3 sem. cr.)**
Teachers develop their own understanding of geometry and measurement, including such topics as measuring using nonstandard and standard units; classifying, defining, and comparing two- and three-dimensional geometric shapes; applying transformations and using symmetry to analyze mathematical situations; and exploring area, perimeter, and surface area of basic geometric shapes and solids. The NCTM Process Standards of problem solving and communication are included.

**MATH 6683 Elementary Mathematics: Algebra (3 sem. cr.)**
Teachers develop their own understanding of algebra, including topics such as geometric and numeric patterns, functions, invented and conventional symbolic notations, and basic equations. The NCTM Process Standard of connections between mathematic concepts, real-world applications, and other disciplines is included.

**MATH 6684 Elementary Mathematics: Data Analysis and Probability (3 sem. cr.)**
Teachers develop their own understanding of data analysis and probability, including such topics as collecting, organizing, and displaying data; using appropriate statistical methods to analyze data; and understanding and applying basic concepts of probability. The NCTM Process Standard of reasoning and proof is included, along with integrating technology and ensuring equity in a standards-based mathematics classroom.

**MGMT**

**MGMT 1000 Success Strategies in the Online Environment (5 cr.)**
After successful completion of this course, students will be prepared to use Walden’s online learning environment, including email, Web browsers, and other techniques of online communication and interaction. Students also learn about the skills required to perform successfully in the program, including
writing skills, critical-thinking skills, using library resources, registration, and time management. Students are introduced to student services, including financial aid and academic counseling.

MGMT 1001 Developing Student Portfolios (1 cr.)
This course provides students with a framework for developing a student portfolio. Students learn about the value of creating a student portfolio and how it is used to communicate and demonstrate their academic accomplishments. Students are introduced to tools and techniques that will help them to develop, manage, and maintain their portfolios. They will demonstrate the ability to apply the structure and methods presented in this course by composing a high-level design and comprehensive outline for a student portfolio. (This course is taken in conjunction with MGMT 1000. Prerequisite: Online software orientation.)

MGMT 3001 Management in the 21st Century (5 cr.)
In this course, students gain a working knowledge of the essential principles and concepts of management theory and practice. The course is structured so that students examine the interrelationships among the major business disciplines and gain a comprehensive perspective with which to organize additional study in management. Practical applications of the manager’s role in planning, organizing, staffing, directing, and controlling are demonstrated and evaluated.

MGMT 3002 Marketing (5 cr.)
Students examine basic marketing functions and the execution of successful marketing processes. They gain a fundamental understanding of marketing concepts, practices, terminology, associated technologies, and practical applications including customer relationship management. (Prerequisite: MGMT 3001.)

MGMT 3003 Human Resource Management (5 cr.)
The course provides students with a comprehensive overview of human resource management. Traditional topics such as job analysis and design, recruitment, selection, performance appraisal, training, staffing, career management, compensation, benefits, health and safety, and employee relations are examined. Technology-based resources are also evaluated. (Prerequisite: MGMT 3001.)

MGMT 3004 Financial Management (5 cr.)
The principles of finance are examined from an applied perspective of the difficult strategic and operational decisions that exist in the business environment. The general objective of the course is to provide decision-makers with the financial and managerial finance theory, concepts, and tools necessary to make better financial management decisions as well as to conduct sound financial analysis. (Prerequisite: MGMT 3001.)

MGMT 3005 Information Systems in Enterprises (5 cr.)
An introduction to enterprise information systems, this course reviews their characteristics, their impact on the enterprise, their role in organizations, and their current architectures, enabling tools, and project cycles.

MGMT 3101 Ethical Leadership (5 cr.)
This online leadership course helps prepare students to assume a leadership role in the modern organization. The basic principles of leadership, motivational theory, the importance of communication, and current and future trends are introduced. Students assess, discuss, and learn how to apply their own styles of leadership in the workplace and the community. Emphasis is on ethical leadership through personal and interpersonal effectiveness and organizational development. Students also learn the importance of followership and the similarities between the roles of follower and leader at all levels of the organization. (Prerequisite: MGMT 3001.)
MGMT 3102 The Dynamics of Change (5 cr.)
Students examine change as it impacts people, processes, and products. They learn to employ tools for dealing with and managing change. They learn methods for coping with change as an individual, a member of a group, and a member of an organization. (Prerequisite: MGMT 3001.)

MGMT 3103 Knowledge Management and Organizational Learning (5 cr.)
Students learn how information systems enable organizations to systematically identify, acquire, store, analyze, distribute, and reuse information and knowledge from all sources (e.g., internal and external, explicit and tacit) to enhance organizational productivity and competitiveness. The course extends the theory of Knowledge Management and Intellectual Capital to the development of learning organizations and evaluates the definition of learning organizations and the creation of environments that facilitate knowledge growth and distribution. (Prerequisite: MGMT 3001.)

MGMT 3104 Accounting Principles (5 cr.)
An introduction to accounting, this course presents the basic techniques and procedures of accounting for organizations. Students completing this course are expected to understand the policies and procedures in an accounting system; be able to prepare basic financial statements; understand the acceptable methods of valuing assets, liabilities, and owner’s equity; and appreciate the value of computer technology in accounting. (Prerequisite: MGMT 3001.)

MGMT 3105 Global Business in the 21st Century (5 cr.)
A survey of the global business environment in the 21st century, this course introduces the basic concepts of global business activity and theory. Students are introduced to the major foreign environmental forces, focusing on strategic management issues, including competitive, financial, economic and socioeconomic, cultural, political, legal, and labor factors. (Prerequisite: MGMT 3001.)

MGMT 3106 Entrepreneurship/Small Business (5 cr.)
This course examines the processes required to undertake the creation and maintenance of a successful business enterprise, with an emphasis on small business. Students focus initially on startup basics for a new small business, followed by the details involved in the development of a business plan. Finally, the “nuts and bolts” of day-to-day business management are examined, with issues ranging from legal matters to employment decisions. (Prerequisite: MGMT 3001.)

MGMT 3107 Critical Thinking and Decision-Making (5 cr.)
Students become familiar with the importance of the scientific method as the basis for critical thinking and decision-making. Problem-solving and decision-making based on recognizing problems, gathering data, developing alternatives, and choosing a solution are critical skills for the professional manager. Throughout the course, students apply these skills to a variety of everyday business examples.

MGMT 3201 Information Systems Architecture I (5 cr.)
This course emphasizes the components of an information system, introduces problem-solving and design paradigms, introduces algorithm development and object-oriented programming, and ties together the components of an information system and the processes by which they are developed. Learning activities include developing the ability to use the concepts to create simple programs or program components. (Prerequisite: MGMT 3005.)

MGMT 3202 Information Systems Architecture II (Object Analysis-Design) (5 cr.)
An introduction to the concept of information abstraction, this course examines the role of abstraction in the development of the information systems architecture. The basic types of data and information elements are described, data structures are developed, and the interaction of data structures with the hardware elements of an information system are explored. Object-oriented case studies are used. Students
develop object-oriented applications that illuminate the impact of information abstraction and complete a course project. (Prerequisite: MGMT 3201.)

**MGMT 3203 Information Databases and Transaction Processing (5 cr.)**
Students are introduced to the concepts of data modeling and to current models with their approaches to the organization of data. The design and normalization of data for the database of choice are discussed. Query processing is presented, and students exercise a query processor against a database that they have created. Students are introduced to transaction processing with the associated concurrence, integrity, and recovery problems of a transaction-based system. (Prerequisite: MGMT 3005.)

**MGMT 3204 Business Process Redesign (5 cr.)**
The concepts and methodology for business process redesign are presented in this course. Emphasis is placed on how information systems serve as enablers for business process redesign. Students learn how to analyze business processes and redesign them for dramatic results. The course includes case studies that provide practical application of the concepts and methodologies. (Prerequisite: MGMT 3005.)

**MGMT 3205 Telecommunications and Networking (5 cr.)**
Students become familiar with and gain a working knowledge of the connectivity issues, performance issues, and standards and protocols of a variety of networking configurations. (Prerequisite: MGMT 3005.)

**MGMT 3206 Distributed Systems (5 cr.)**
Students explore distributed systems at the organizational level, at the user support level, and at the functional level, with the goal of being able to design, implement, and manage a distributed system. The course emphasizes understanding the information components of the system and the combining of these components to meet the information needs of the organization. The issues of system reliability, performance, security, and cost are addressed. (Prerequisites: MGMT 3201, 3202.)

**MGMT 3207 Data Warehousing, Data Mining, and Decision Support Systems—Executive Information Systems (5 cr.)**
This course enables students to acquire a broad understanding of business management information systems and their components while incorporating the use of data and analysis models. (Prerequisites: MGMT 3201, 3202.)

**MGMT 3501 Statistics (5 cr.)**
This course examines the fundamentals of probability and descriptive and inferential statistics. Hypothesis testing, simple regression, and correlation analysis are covered, with emphasis on the application of these techniques to business decision-making. The analysis and application of statistics in cases are stressed.

**MGMT 3502 Macroeconomics (5 cr.)**
This is an introductory course in macroeconomics that covers basic economic principles and their application to the macro economy. Topics covered include the principles of economic decision-making; definition and measurement of gross domestic product, national income, employment, inflation, and other variables commonly used by economists; factors affecting economic growth; description and application of models used to evaluate the effects of policies and changes in external variables on the economy; the roles of fiscal and monetary policies; the banking system; and the effects of globalization and international trade.
**MGMT 3503 Microeconomics (5 cr.)**
The principles of microeconomics explain how in a market economy the price system answers the fundamental economic questions: what, how, and for whom are goods and services produced and distributed? The behaviors of households that supply factors of production—natural resources, labor, and capital—to firms, and that purchase consumer goods and services from firms are examined. Also examined are firms that maximize profit through their decisions about acquiring factors of production, controlling costs of production, choosing the optimal level of output, competing with other firms under different market structures, and making investment decisions about entering new markets.

**MGMT 4101 Corporate Finance (5 cr.)**
Students gain an understanding of the decisions made by finance managers in organizations. These decisions include choosing between competing investment opportunities; valuing assets; measuring risk and return; financing the firm’s operations; making dividend policy and capital structure decisions; and valuing financial instruments. *(Prerequisite: MGMT 3004 or equivalent.)*

**MGMT 4102 Financial Institutions and Markets (5 cr.)**
This course investigates the following financial markets: money, bond, mortgage, stock, foreign exchange, and derivative security markets. Students learn about the operation and regulation of commercial banks, thrift institutions, insurance companies, securities firms, investment banks, finance companies, mutual funds, and pension funds. *(Prerequisite: MGMT 4101.)*

**MGMT 4109 Management and Organizational Behavior (5 cr.)**
The focus of this course is on human behavior in the context of the organization in a domestic and/or a transnational setting. Students gain an understanding of the concepts of human and organizational functioning, with emphasis on application of these concepts to managerial problems and solutions in both domestic and transnational settings. Students examine individual perception, attribution, and learning; differences in personality; career development; motivating and rewarding employees; and making effective decisions. The course also provides an overview of ethics and the ethical issues faced by domestic and transnational organizations and managers, social responsibility, communications, motivation, and leadership. By focusing on the elements of national culture, students examine the impact culture has on leadership and management as well as the day-to-day operational issues endemic to transnational and global businesses. Finally, students investigate the management of diversity in the workplace, especially in a transnational and global setting. Learning is accomplished through a diagnostic approach employing text readings, individual and case analyses, quizzes and exercises, and a final individual organizational plan. The course is ideally suited to current and potential managers either presently operating in an international environment or contemplating doing so.

**MGMT 4111 International Finance (5 cr.)**
This course introduces students to the field of international finance. Primarily, emphasis is on international financial markets and the macroeconomics of international financial flows. Topics include foreign exchange, international securities markets, and international banking.

**MGMT 4120 Strategic Human Resource Management (5 cr.)**
Students learn to align human resource management functions and activities with corporate strategic goals. Strategies, such as incentive cash and/or stock compensation programs, employee ownership, and nonmonetary rewards, are compared and contrasted. The impact on employee motivation and retention is also examined. *(Prerequisite: MGMT 3003.)*

**MGMT 4121 Human Resource Development and Change (5 cr.)**
This course addresses the process of human resource development and organizational change, including training and development, leadership development, and performance improvement through topics such as
learning principles, interventions, employee orientation and socialization, performance management and coaching, and diversity. *(Prerequisite: MGMT 4120.)*

**MGMT 4122 Human Resource Management: Analysis and Problems (5 cr.)**
The role of human resource management is examined in the areas of performance appraisal systems, compensation, and labor-management issues. The role of federal regulations, including equal opportunity, sexual harassment, discrimination, and other employee-related regulations, is reviewed. *(Prerequisite: MGMT 4121.)*

**MGMT 4140 Marketing Management (5 cr.)**
The course is designed to instruct students in creative decision-making for marketing mix, channels of distribution, and industrial and international marketing. Special emphasis is on the development, organization, implementation, and control of the marketing plan. *(Prerequisite: MGMT 4121.)*

**MGMT 4141 International Marketing (5 cr.)**
Students are introduced to the world of international marketing. Students explore culture, legal, technology, and financial aspects of various countries. In addition, students learn to apply the tools of the marketing management process to the international environment. *(Prerequisite: MGMT 4140.)*

**MGMT 4142 Case Study: Services Marketing (5 cr.)**
Students evaluate the difference between product and service marketing, service marketing mix, total quality management, customer perceptions of services, and pricing of services. Students develop a comprehensive marketing plan in the context of real-world service challenges. *(Prerequisite: MGMT 4141.)*

**MGMT 4220 Web Architecture (5 cr.)**
This course provides an introduction to the Internet and World Wide Web, an understanding of HTML scripting, and the basics of information architecture. Students demonstrate their ability to apply the methods presented in this course by developing a personal Web site, critiquing a personal Web site found on the Internet, providing feedback to peers on their Web site, critiquing a large business or organization’s Web site for information architecture pros and cons, and taking a quiz on information architecture practices. *(Prerequisite: MGMT 3005.)*

**MGMT 4221 Database Systems and Architecture (5 cr.)**
Students explore database systems and architecture at the centralized systems level, the client-server level, and the Web-based level, with the goal of being able to design, implement, and manage the architecture of a database system. Course emphasis is placed on understanding the integrated components of the system, such as networking and Web-based technologies, and the combining of these components to meet the information needs of the organization. The issues of conceptual database design methodology for relational databases, query processing, monitoring, and tuning, as well as transaction management, are addressed. *(Prerequisite: MGMT 3005.)*

**MGMT 4222 Network and Telecommunications Architecture (5 cr.)**
In this course, students become familiar with and gain a working knowledge of the networking services required of an IT professional in an IT support environment. This includes the network architecture and IT infrastructure architecture required to support intranet and Internet services. *(Prerequisite: MGMT 3005.)*

**MGMT 5101 Business Capstone Project—Strategic (5 cr.)**
A capstone course is designed to bring together the knowledge gained through the entire program and permit the student to demonstrate competency and mastery in the various course competencies. The major
course project in this capstone course is a strategic case study. Students are expected to apply and integrate a variety of skills, tools, and knowledge to assess the strategic issues in a real-world case analysis and arrive at recommendations for change and/or improvement. The course is designed to permit students to demonstrate their understanding and competency in complex problem identification and solution. (Prerequisite: All other program courses.)

**MGMT 5201 Information Systems Capstone (5 cr.)**
Students plan, complete, and write their report for a capstone project by applying and integrating a variety of systems skills, tools, and knowledge to a real-world complex system. Capstone project reports are professional products that demonstrate what students understand about complex systems. Students are encouraged to choose capstone topics that will benefit themselves and their employers: this makes the work more interesting and provides the greatest return in terms of learning and professional satisfaction. Course projects are often excellent capstone topics; many capstone courses offer the opportunity to continue work on a topic started in a previous course. (Prerequisite: All other program courses.)

**MMBA**

**MMBA 6300 Success Strategies in the Online Environment (4 cr.)**
This course introduces students to Walden University and the M.B.A. program. It prepares students to use the online learning environment and Internet tools such as email and Web browsers, techniques of online communication and interaction, time and stress management, APA formatting, writing skills, critical-thinking skills, and group work skills. It also helps them finalize their course of study. (This course must be successfully completed before a student can take further courses in the M.B.A. program.)

**MMBA 6305 Reflective Practice in Management (4 cr.)**
This course focuses on the theoretical basis of management and the reflective application of theory into practice. Students study management theory from some of the great books and case studies in management history and reflect on, discuss, and write about how the theories can be applied in today’s workplace.

**MMBA 6310 Global Management (4 cr.)**
This course examines the scope of business expansion to a multinational and beyond to a global level. It discusses how government, diplomacy, and operations of international organizations facilitate the integration of national markets into a global market. It also contrasts international with domestic risk management, including hedging foreign exchange exposure, translating foreign earnings to domestic financial statements, dealing with international taxation, and investors’ exposures to political interference with business in diverse countries (sovereign risk). Moreover, it identifies and discusses cross-cultural factors that affect business strategies, investment decisions, operations, marketing, and human relations. Finally, it considers some of the more prominent U.S. laws that affect the operations of U.S.-based global firms, including legislation on corrupt practices.

**MMBA 6320 Human Resource Management (4 cr.)**
This course addresses the functional areas of professional human resource management, including strategic roles, employment policies, legal and environmental regulations, interviewing and hiring, rewards and recognition, pay and benefits, diversity, job assessment, health and safety, ethics, negotiating and bargaining, and communications.
MMBA 6330 Management Information Systems (4 cr.)
This course is designed to deliver an in-depth understanding of information resources in organizations and their business implications. Ceaseless developments in the IT world are forcing management to rethink their approach to business and to explore new ways of structuring the organization to respond efficiently to the demands of customers and employees.

MMBA 6340 Business Statistics (4 cr.)
This course examines the applications to business of the fundamentals of probability, descriptive and inferential statistics, hypothesis testing, and regression and correlation analysis.

MMBA 6350 Fundamentals of Marketing (4 cr.)
This course surveys the fundamental concepts and processes involved in marketing products and services in today’s competitive, dynamic marketplace. Major decisions relating to market segmentation and targeting, and the development of a marketing mix are examined within a conceptual framework that helps organizations plan, implement, and control the sum total of their marketing activities.

MMBA 6360 Introduction to Financial and Managerial Accounting (4 cr.)
This course prepares students to use the language of business accounting. Students learn to examine financial statements to check the company’s profitability, liquidity, solvency, and return to shareholders. Students learn to use accounting data to make decisions in business, such as product pricing, cost cutting, new equipment acquisition, and new enterprise startup.

MMBA 6370 Financial Management (4 cr.)
This course applies introductory financial principles to solving realistic personal and corporate financial problems using the Excel spreadsheet program. It covers the “three pillars” of financial management: the time value of money, asset valuation, and risk management. The time value of money is applied to solving problems in corporate capital budgeting and in personal financial planning. Asset valuation methods are applied to valuing stocks, bonds, investment projects, and futures and options contracts. Risk management first identifies sources of business risk and quantifies that risk. Second, it reduces risk by diversifying assets, by hedging risk through futures contracts, and/or by insuring against risk through the purchase of option contracts. (Prerequisite, MMBA 6360, or equivalent)

MMBA 6380 Legal and Ethical Issues for Managers (4 cr.)
Through class discussions, this course analyzes applied legal and ethical decision-making across a broad spectrum of companies and subjects pertinent to the modern business organization. The course introduces and explores a range of ethical theories, concepts, and ideas about organizational decision-making, with the intent of making M.B.A. students more ethically aware decision-makers and effective and thoughtful senior leader-managers. The course seeks to help students develop their own values and ethical philosophies, thereby assisting in their professional growth and development. (Prerequisites: All core and specialization courses.)

MMBA 6390 Strategic Management and Planning (4 cr.)
This is an integrative, capstone course in strategic management and business policy for those students about to complete their M.B.A. graduate study. The course focuses on long-range, strategic problems faced by a CEO and the top management team of an organization. Strategy implementation problems faced by department- or division-level managers are also considered. The course builds on and synthesizes students’ prior coursework and knowledge in different functional areas and applies this integrated understanding of business and management issues to real-world case problems and business decisions. (Prerequisites: All core and specialization courses.)
**MMBA 6401 Corporate Finance (4 cr.)**
This course applies financial tools to investigate practical problems using real-world data sets and case studies. The practical problems include finding hurdle rates for investment decisions, measuring returns on investments, evaluating financial structure decisions, defining the dividend policy, and valuing operations. *(Prerequisite: MMBA 6370 or equivalent.)*

**MMBA 6402 Financial Institutions and Markets (4 cr.)**
A broad range of financial institutions and services is covered in this course. It evaluates the reaction of financial institutions in meeting the demands of retail customers and how these institutions accommodate resulting risks. It also evaluates the following financial markets: money, bond, mortgage, stock, foreign exchange, and derivative security markets. The course covers the operation and regulation of commercial banks, thrift institutions, insurance companies, securities firms, investment banks, finance companies, mutual funds, and pension funds. *(Prerequisite: MMBA 6401.)*

**MMBA 6403 Case Study: Financial Modeling (4 cr.)**
This course uses Excel models to accomplish financial analyses of key business decisions, including valuation, leasing and leverage leases, portfolio models with and without short sales, option pricing models and portfolio insurance, real options for valuation, and calculations for bond returns and durations. *(Prerequisite: MMBA 6402.)*

**MMBA 6405 Organizational Behavior (4 cr.)**
In organizational behavior, the three levels of analysis are individual, group, and organization system. This course investigates the individual and the foundations of individual behavior, including personality and emotions, motivation, and decision-making. The course examines the foundations of group behavior: work teams, communication, leadership and creating trust, power and politics, and conflict and negotiation. Finally, the course examines the foundations of organization structure: technology and work design, performance appraisal and reward systems, organizational culture, and organizational change and development. Three contemporary topics are also studied: diversity, globalization, and ethics.

**MMBA 6413 Case Study: Risk Management and Insurance (4 cr.)**
This course uses risk management concepts to evaluate potential corporate exposure, including (a) identifying and analyzing loss exposures, (b) selecting alternative techniques to reduce exposures, (c) selecting appropriate techniques to reduce risks, and (d) implementing and monitoring selected techniques. The course explores nontraditional risk-management techniques, such as risk financing through market instruments, contractual transfers, and captive insurers. Students develop a risk-assessment instrument that can be applied to evaluate future risks of any organization.

**MMBA 6421 Advanced Marketing Management (4 cr.)**
This course investigates advanced management concepts in the areas of market segmentation, multiple market channels, competitive intelligence, integrated marketing, and e-business. Students work in teams to develop a comprehensive management-marketing plan for one new product or service chosen by the team at the beginning of the course.

**MMBA 6422 International Marketing (4 cr.)**
This course covers global visions, global marketing management, international pricing, political environment, legal aspects, and business ethics. Students work in teams to develop a comprehensive international marketing plan. *(Prerequisite: MMBA 6421.)*

**MMBA 6423 Case Study: Services Marketing (4 cr.)**
This course evaluates the differences between product and services marketing. It examines the service marketing mix, total quality management, customer perceptions of services, pricing of services, and
relationship marketing. Students apply critical service marketing concepts to real-world situations using team case studies. *(Prerequisite: MMBA 6422.)*

**MMBA 6431 Value-Based Budgeting and Prospective Financial Analysis (4 cr.)**
Preparing prospective financial reports as part of the budgeting cycle is the end-game for many companies. In this course, students learn that the final budget report is really the beginning of the planning cycle. How companies complete this cycle is crucial to their survival. Students learn how to manage the budget process, defend their group or department budget requests, communicate results to intra- or intercompany stakeholders, and complete the budget cycle for optimal results. Topics include value-based budget planning and preparation, department dynamics, financial communication, cycle completion, and prospective analysis.

**MMBA 6432 Sarbanes-Oxley, Auditing, and the Regulatory Environment (4 cr.)**
Living in a post-Sarbanes-Oxley world where financial audits can dramatically impact company operations is the key focus of this class. Regulations to control abuses by corporate officers, auditors, and investment bankers are growing substantially. What were originally the SEC and the Accounting Principles Board are now various accounting regulatory bodies surrounded by a very active political environment. In this course, students examine the impact of Sarbanes-Oxley and how the regulatory process has progressed as a result of this far-reaching act. Students learn to assess the risks of the accounting function, analyze internal controls and information-flow controls designed to protect stakeholders, and evaluate the role of ethics on compliance and full disclosure. Topics include regulators such as the SEC, FASB, IASB, PCAOB, and AICPA; coping with external and internal auditing; and the communication process within these groups.

**MMBA 6433 Financial Reporting Analysis (4 cr.)**
This course provides the tools and concepts necessary for managers to make real decisions with the data provided by accounting or finance departments. Students use real companies to analyze financial reports, manage negotiations, and interpret various models in order to make informed decisions.

**MMBA 6441 E-Business Technology (4 cr.)**
This course provides an in-depth understanding of how to integrate an end-to-end e-business technology plan into an enterprise infrastructure and how to determine its business value. It focuses on supply chain management (SCM) and the necessary concepts associated with the infrastructure, including networks, security, back-end processes, EDI, VANs, ISPs, and portals. The course covers the issues of system planning, performance, capacity planning, testing, and system management.

**MMBA 6442 E-Business Marketing (4 cr.)**
This course focuses on customer relationship management (CRM) for both traditional firms and digital startups. Traditional and e-marketing practices are compared and contrasted with a focus on the important elements of the user interface. *(Prerequisite: MMBA 6441.)*

**MMBA 6443 Case Study: E-Business Strategy (4 cr.)**
This course addresses business-to-business (B2B) issues with an overview of business strategies. It examines case studies of business process fundamentals and process improvements. It includes a business plan outline, a strategy handbook for the Internet, and insights into the criteria used by investors to make funding decisions for new companies. Students develop a comprehensive strategic plan for an e-business. *(Prerequisite: MMBA 6442.)*

**MMBA 6450 Managerial Economics (4 cr.)**
This is a basic economics course that covers applied economic theory, practice, and thinking. It emphasizes selected micro- and macroeconomic topics that are pertinent to contemporary business
decision-making. Students learn to use fundamental economic concepts by applying them to specific real-world problems or events. The evaluation of current issues, such as government regulation, e-commerce, monetary policies, energy shortages, and international trade, is incorporated into the course through student research that builds on the concepts presented in the course and on information obtained from the Internet and other publicly available data sources.

**MMBA 6451 International Trade (4 cr.)**
This course investigates the relationship of microeconomics and the special characteristics of trade. It covers trade policy, politics, emerging considerations among developed and developing countries, and analyses of trade and investment decisions.

**MMBA 6452 International Finance (4 cr.)**
This course addresses open economy, macroeconomic models, and policies. It covers the asset approach to foreign exchange rates, implications for economic policies of fixed and flexible exchange rate systems, current examples of alternative exchange rate regimes, corporate risk management, optimum currency areas, the euro, exposure to developing countries, financial crises, and international debt-forgiveness policies. *(Prerequisite: MMBA 6451.)*

**MMBA 6453 Case Study: International Business Strategy (4 cr.)**
This course investigates case studies of multinational corporate management issues, including choosing between international and global competition, strategies for international entry to manufacturing, service and entrepreneurial industries, alliances, partnerships, global marketing, research and development, human resources, and acquisitions. *(Prerequisite: MMBA 6452.)*

**MMBA 6461 Management of Technology (4 cr.)**
This course examines the key concepts in management of information technology and the role of technology managers. It presents management of technology from both a process and a system perspective, and investigates major technical issues involved in innovation and implementation.

**MMBA 6462 Organizational Performance Improvement (4 cr.)**
The concepts of performance improvement and process re-engineering are addressed in this course. It investigates the achievement of organizational performance improvements through redesigned business processes and the use of information. Students benchmark and analyze current best practices in organizational performance improvement. *(Prerequisite: MMBA 6461.)*

**MMBA 6463 Case Study: Project Management (4 cr.)**
This course explores the theory and practice of how to manage projects. Topics include effective project management styles, critical factors for project success, organizational support systems that enhance projects, project authority, and ethics in project execution. Students develop a comprehensive strategic plan for managing technology, using a project management approach. *(Prerequisite: MMBA 6462.)*

**MMBA 6472 Human Resource Development and Change (4 cr.)**
This course addresses the area of individual development, including motivation, organizational design, knowledge management, 360-degree feedback, identifying and developing leaders, and the future direction of human resources. *(Prerequisite: MMBA 6474.)*

**MMBA 6473 Case Study: Applications in Human Resource Management and Professional Practice (4 cr.)**
This course fosters further evaluation of the human resource function through the active assessment of a number of mini case studies focusing on regulatory issues, job assessment, recruiting and orientation, health and safety, and labor relations. *(Prerequisite: MMBA 6472.)*
**MMBA 6474 Strategic Human Resource Management (4 cr.)**
Students adopt a strategic view of human resource management policies and programs in evaluating their alignment with organizational strategic goals. From the view that employees are assets, strategic HR formulates policies and programs that support high performance and innovation through balancing rewards, training, empowerment, and job design to achieve a competitive advantage. (*Prerequisite*, MMBA 6320 or equivalent)

**MMBA 6481 Creating and Using Knowledge for Business Performance (4 cr.)**
This course focuses on the role of the individual in creating knowledge from work experience that can be used for improved performance. Many knowledge management systems and strategies take a top-down approach that wrongly assumes that people already know how to create new knowledge from experience. This course examines the following: (a) how employees interpret problem situations, (b) the action rules that people use to achieve goals, (c) how to improve monitoring of feedback from performance, (d) pragmatic principles for creating knowledge at work, and (e) the basic concepts of operational innovation.

**MMBA 6482 Leading Knowledge-Based Organizations (4 cr.)**
This course looks at the role of leaders in designing a balanced knowledge management strategy that is aligned to the performance problems of the business. The course examines individual and organizational issues, such as leader learning styles, organizational culture, types of knowledge, and balancing the need for new knowledge with the need to share existing knowledge. This course focuses on developing a custom knowledge management strategy that is functional, adaptive, sustainable, and timely (FAST). (*Prerequisite*: MMBA 6481.)

**MMBA 6483 Case Study: Problems in Knowledge Management (4 cr.)**
This course uses cases and computer simulation to enable students to apply the knowledge management concepts and strategies they have learned. The course focuses on teaching students how to develop a balanced knowledge management strategy that integrates learning, knowledge creation, knowledge transfer and integration, and knowledge validation. Students conduct an action research project. (*Prerequisite*: MMBA 6482.)

**MMBA 6491 The American Health Care System: A Systems Perspective (4 cr.)**
This course examines the American health care system from many perspectives. Students gain an understanding of the broader system and the interdependencies of all of its parts. Students are also introduced to other health care systems in the world and perform a comparative analysis to the American system.

**MMBA 6492 Health Care Quality Management (4 cr.)**
This course focuses on health care quality management and continuous improvement. Students explore quality and utilization management as a leading method for containing health sector costs while maintaining quality. (*Prerequisite*: MMBA 6491.)

**MMBA 6493 Health Care in the 21st Century (4 cr.)**
This course deals with emerging issues that are relevant to health care management. Students consider future trends and how they will affect health care organizations. As part of this analysis, students learn how to create a health care organization and prepare it for continuous changes. (*Prerequisite*: MMBA 6492.)
MMPA

MMPA 6000 Foundations for Graduate Study (6 cr.)
This course introduces students to the university, the online learning environment, and the M.P.A. program. It is required of all students and is a prerequisite for taking any other course in the program. It prepares students to use the online course software, as well as Internet tools, email, and Web browsers. In addition, it provides basic instruction in techniques of online communication and interaction, time and stress management, APA formatting, writing skills, critical-thinking skills, and group work. (This course must be completed in the first quarter at Walden and must be successfully completed before a student can take further courses in the M.P.A. program.)

MMPA 6210 Managing at the Boundaries: Creative Thinking for Social Change (6 cr.)
This course examines the historical and contemporary patterns of interaction between levels of government and between the public, private, and nonprofit sectors in the United States. Of all the Western democracies, the United States has the most fully developed nonprofit sector. In the past 20 years, the private sector has become more and more important to the other two sectors with, for example, growing efforts to privatize public service delivery and to use corporate strategies and connections for enhanced revenue in the nonprofit sector. Increasingly, the boundaries between governmental levels and the three sectors have become more blurred and the action at these intersections more critical for the effectiveness of public/nonprofit sector leaders and managers. (This course must be taken in the second quarter at Walden.)

MMPA 6220 Principles of Public Administration: Applied Critical-Thinking Skills (6 cr.)
This course familiarizes students with the historical and contemporary roles and relationships of the public and nonprofit sectors in the United States. It provides a scholarly perspective on public policy and administration that traces major theories associated with the field and the political, social, and economic context within which they developed. Students are encouraged to reflect upon their career experiences and prior education as a basis for integrating theory and practice and for establishing specific academic objectives to help them achieve individual professional goals. This is intended to make a strong connection between students’ own professional development and the development of the major theories and concepts of public administration. (This course must be taken in the third quarter at Walden.)

MMPA 6230 Professional Leadership and Ethics (4 cr.)
This course examines the ethical issues of public and nonprofit sectors. It provides conceptual tools to clarify moral dilemmas and analyzes individual decision-making strategies and organizational programs from an ethical perspective. (This course must be taken in the fourth quarter at Walden.)

MMPA 6240 Cultural Competency: Communication Skills for a Global Society (2 cr.)
This course focuses on the information a person needs to know in order to work effectively in teams, collaborate with others, and function effectively in a diverse, global environment. It focuses on the different learning styles, information processes styles of individuals, the dynamics of group work and teams, and understanding basic issues and practices in cross-cultural communication and understanding. (This course must be taken in the fourth quarter at Walden.)

MMPA 6250 Nonprofit and Governmental Budgeting and Finance (4 cr.)
This course examines governmental and nonprofit budgeting policies and practices, as well as the fiscal climate within which these organizations have to operate. Students gain a better understanding of the role of finance in public and nonprofit organizations and the theories underlying major fiscal policy debates.
They also learn how to construct budgets and capital improvement plans, as well as how to successfully generate funds to support nonprofit sector organizations.

**MMPA 6265 Organizational Theory and Behavior (4 cr.)**
This course focuses on behavior in organizations as influenced by individual differences, group processes and interactions, and organizational processes. Skills and abilities essential for effective management in changing organizational contexts are emphasized. Topics examined include motivation, productivity, diversity, group development, team building, decision-making and communication processes, power and politics, leadership, job design, and organizational culture.

**MMPA 6275 Human Resource Management (4 cr.)**
This course is a survey of philosophy, approaches, and systems of managing people in government and nonprofit organizations. It includes historical developments, personnel management practices and behaviors, and current issues. It examines recruitment, classification, compensation, training, evaluation, and labor-management relations functions.

**MMPA 6285 Policy Analysis (4 cr.)**
This course provides a broad perspective on the policy process, recognizing that both public and nonprofit administrators are intimately involved in executive and legislative/board policy- and decision-making. It focuses on how policy is initiated, researched, shaped for decision-making, decided, implemented, and then evaluated. Balanced attention is given to the dynamics of the policy-making process itself and the analytical and communications tools that equip professionals at many levels in organizations to be effective actors in this process.

**MMPA 6295 Applied Research (4 cr.)**
This course is designed to introduce students to the research process as applied to problems in the public and nonprofit sectors. Beginning with an overview of the scientific method, it covers each phase of the research process, including formulation of the research question, model building and conceptualization, data collection and analysis, and reporting of results and conclusions. In addition, the course introduces qualitative methods and assesses the strengths and weaknesses of both quantitative and qualitative methods. Students are not required to have a background in quantitative methods, statistics, or computer-based analysis.

**MMPA 6300 Strategic Management of Information (4 cr.)**
This course is designed to give students an in-depth understanding of information resources and their implications for the public and nonprofit sectors. Advancements in information technology, which are making e-government a reality and are causing administrators to rethink their approach to service delivery, are explored as well as new ways of structuring organizations for greater productivity. The human systems and organizational culture impacts of information technology are also examined.

**MMPA 6305 Capstone Seminar (4 cr.)**
This course is intended to integrate learning from all the master’s courses to demonstrate a stronger, more intellectually cohesive understanding of public and nonprofit administration. It may focus on governance, policy, or leadership and management in either the public or nonprofit sectors, or it may take a cross-sector comparative perspective. *(This course is required for M.P.A. students and must be taken in the final quarter of study.)*

**MMPA 6320 Public Policy Implications of Terrorism Legislation and Policies (4 cr.)**
This course provides a broad perspective on the history of the U.S.A. Patriot Act, similar terrorist legislation and immigration laws, and their policy implications on law enforcement, governmental entities, organizations, and individuals. It provides a basic foundation upon which to build for those
public administrators and public policy analysts who are charged with drafting and implementing public policy and enforcing and/or responding to potential terroristic threats, while simultaneously upholding and protecting constitutional freedoms. Material for this course is drawn from contemporary texts, Web sites, case studies, and material representing international, national, and local governments and organizations. Learners critically review and analyze the U.S.A. Patriot Act and similar terroristic legislation and policies, and participate in online discussions about these laws and their implications on U.S. Constitutional freedoms.

**MMPA 6321 Terrorism: A Systemic Approach for Emergency Preparedness (4 cr.)**
This course provides participants with an overview of terrorism—local, national, and international—and the need to develop a systemic approach for emergency preparedness. Topics include, but are not limited to, terrorism overview, terrorism and public health, bioterrorism, biosecurity, cyberterrorism, risk assessment, implications for public health, and components of a systemic preparedness infrastructure. Course participants begin the development and/or analysis of a terrorism preparedness infrastructure, and participate in online discussions.

**MMPA 6322 Critical Incident Planning and Leadership (4 cr.)**
This course examines the principles of emergency planning, selection of leaders, specialized planning (e.g., schools, tourism), mutual aid, and leadership theories. It provides a basic foundation for public administrators to develop a critical incident plan and also understand leadership theories. Course participants critically analyze case studies, identifying weaknesses and potential solutions.

**MMPA 6330 Holding Up the Mirror: Understanding Different Cultures and Increasing Global Consciousness (4 cr.)**
This course offers students an opportunity to explore and understand the cultural values and styles of communication, reasoning, and leadership unique to their home culture. Students apply their increased understanding to other cultures. They also identify and become familiar with the challenges American nonprofits face as they work internationally or cross-culturally within the United States. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**MMPA 6331 Crossing Borders: U.S. and International NGO Organizational Cultures and Environments (4 cr.)**
In this course, students study in depth the cultures, structures, and activities of NGOs in select countries and compare their activities, organizational cultures, structures, and working environments with nonprofits in the United States. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**MMPA 6332 Placing NGOs in the Global Context (4 cr.)**
This course offers students knowledge and understanding about the geopolitical and economic contexts in which international, nongovernmental, and voluntary agencies function in other countries. Students analyze the historical, political, social, and cultural contexts in which NGOs work and the implications these contexts have on the work of local and international NGOs. Students identify strategies that make the international and cross-cultural efforts of NGOs successful. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**MMPA 6340 Leadership for the Nonprofit Sector (4 cr.)**
This course provides an overview and history of the third sector in American society, featuring governance and nonprofit corporations. The course covers the relationship between the board and the executive director, ethics, fiduciary responsibility, human resources, and board organizational structures. It examines the role of nonprofit organizations in fostering social change and the emerging trend toward entrepreneurship in nonprofits. *(12-week course.)*
MMPA 6341 Fund Raising and Marketing in Nonprofit Organizations (4 cr.)
This course examines the history of philanthropy and the philosophy of giving in the nonprofit sector in the United States. It provides students with an understanding of the many fund-raising techniques and funding sources that generate financial support for nonprofits as well as the context in which these methods may be used. (12-week course.)

MMPA 6342 Nonprofit Management (4 cr.)
This course provides the basis for understanding nonprofit management issues and how management in the nonprofit sector differs. The course addresses mission, budgeting, financial management, strategic planning, and outcome evaluation and assessment. (12-week course.)

MMPA 6350 Historical and Contemporary Issues in Criminal Justice (4 cr.)
This course looks at the evolution of crime—from lone criminals to worldwide syndicates—using the scientific rigor built into the selected readings and discussions. Among the topics examined are the philosophy of community- and problem-oriented policing, transnational crime, terrorism, and the new nexus between them. The course equips current and future leaders with the knowledge and depth of understanding to assess and manage the opportunities, innovations, and challenges in their profession.

MMPA 6351 Policy Analysis in the Criminal Justice System (4 cr.)
This course reviews key court decisions and explores the tension between constitutionally guaranteed individual rights and crime-prevention and public-safety efforts. The course also covers policy analysis and planning in the criminal justice field, and offers an understanding of the policy context in which the criminal justice system functions.

MMPA 6352 Leadership: Putting Theory Into Practice in Criminal Justice Administration (4 cr.)
This course introduces students to the problems that currently confront the administration of the criminal justice system, as well as problems predicted for the future. So that students are prepared to lead efforts to address these challenges, this course offers powerful models for strategic, critical, and reflective thinking. This course also immerses students in discussion about the major components of effective justice administration: organizational thought and theory, leadership, human capital, policy development and implementation, and collaboration with other public safety and community organizations.

MMPA 6360 Public Safety Issues (4 cr.)
This course is a comprehensive survey of the issues faced by public safety agencies and personnel at the local, state, and national levels, including police and sheriff, emergency medical, and fire services and related organizations. It emphasizes communication and coordination between public safety organizations.

MMPA 6361 Managing Public Safety Organizations (4 cr.)
This course examines how public safety leaders find solutions to major issues confronting their operating systems, both organizations and communities, through research, analysis, planning, and decision-making. It adapts classic business management techniques and leadership principles to public safety operations. The concepts of “first-planner” and “first-responder” are introduced. Solutions and alternatives to varied situations confronting public safety managers are developed. Emphasis is on systems approaches, environmental analyses, contingency planning, implications for change, coordination, and controls.

MMPA 6362 Ethics in Preserving Public Safety (4 cr.)
This course applies the lessons of the first two courses in the specialization—management issues and planning solutions—to specific cases of leadership and personal responsibility in the public safety field. Using primarily the case study method, students will analyze leadership and ethical issues that public
safety officials encounter in their work and develop effective approaches for how standards and ethics can
best be instilled throughout a public safety organization. Students analyze classic cases, including the
federal 9/11 Commission report, for lessons applicable to any public safety agency and situation—in
intelligence, planning, operations, command, interagency coordination, communication, and technology.

MMPA 6380 Policy and Politics in American Political Institutions (4 cr.)
This course introduces students to the crafts of policy-making and analysis in the American democratic
system. It covers the policy process—agenda setting, using policy analysis tools, managing the political
process, implementing policy, and providing evaluation and feedback. Students develop skills in policy
and economic analysis, as well as skills in determining the political feasibility of proposed policies.
Regulation as a policy choice is discussed. Students enhance their abilities to develop alternatives and to
assess strategies that are proposed to achieve certain policy objectives. Policy areas of interest to students
form the foundation of this course and may include communications, immigration, social, transportation,
housing, labor, arts, and environmental policies.

MMPA 6381 Program Evaluation (4 cr.)
This course provides an introduction to the tools used by policy-makers and policy analysts to evaluate
the impact of social programs. Topics include selecting programs to evaluate, crafting program
descriptions, identifying stakeholders and their interests, developing logic models, framing evaluation
questions, applying utilization-focused evaluation techniques, using quantitative and qualitative tools to
complete formative and summative evaluations, and formulating evaluation reports and providing
feedback to decision-makers. By the end of the course, each student develops a program evaluation
design for a social program.

MMPA 6382 Public Policy and Finance (4 cr.)
This course covers both micro- and macroeconomic models used in policy formulation and how public
finance influences policy choices as well as implementation alternatives. Students examine tax policies
and tax incentive models, budgeting, public/private models, market influences on policy, the impact of
government expenditures on income redistribution, and economic considerations of welfare, food stamps,
workers’ compensation, and Social Security. Outsourcing of public programs is also examined.

MMPA 6390 Strategic Context of Public Management and Leadership (4 cr.)
This course engages students in collaborative study of the changing strategic context of public
administration. Students apply a systems perspective to construct a public enterprise model of the public
organization of their choice, as a way of understanding the strategic context for practical action and the
stakeholder relations involved. This is an organization “mental model” similar to a traditional “business
model,” but includes the three interrelated flows of money-knowledge-influence. Course emphasis is on
management and leading of the unknown—imagining and creating a future that works in a time of
unprecedented and unpredictable change. Students apply strategic scenarios to organizational change for
the public organization of special interest to them. Students also develop professional action habits for
pragmatic action learning in the practice of public administration.

MMPA 6391 Transformative Change in a Shared-Power World (4 cr.)
This course engages students in collaborative study of the nature and methods of transformative change in
the complex human systems of contemporary public organizations. Students learn a pragmatic action
learning process for learning from the experience of transformative change in complex systems. The
dynamics of complex adaptive systems are studied to gain an understanding of how large-scale and highly
interrelated human systems change through self-organization. Appreciative inquiry and other selected
methods of transformative change are studied and applied to a positive organizational change situation of
special interest to the students. Students also develop professional action habits for pragmatic action
learning in the practice of public administration.
MMPA 6392 The Language of Leadership (4 cr.)
In today’s complex environment, leaders engaged in shaping public policy must know how to use the emotional as well as the intellectual power of language to motivate, inspire, and competently manage their organizations. Dynamic leadership requires understanding and use of techniques that affect both conscious and unconscious influences on human behavior. Effective communication connects at many different levels. This course provides students both theoretical and practical information demonstrating the necessary components for making such connections and show them why stories, symbols, and metaphors are an essential element in the language of leadership.

NCSC

NCSC 1001 Structures of Computer Programming I (3 sem. cr.)
This course describes the syntax and semantics of higher level programming language, problem-solving strategies and algorithms, fundamental data structures.

NCSC 1011 Structures of Computer Programming II (3 sem. cr.)
Students are introduced to object-oriented programming concepts (classes, object, inheritance) and abstract data types (list stack, queues, trees). The course explains the use of abstract data types to solve a variety of problems and to implement the solutions in an object-oriented programming language.

NCSC 2201 Discrete Mathematics for Computer Science I (3 sem. cr.)
This course provides the foundations of discrete mathematics. It covers sets, sequences, functions, relations, propositional and predicate logic, recursions, trees and graphs, counting methods, mathematical proofs, and big-O notation.

NCSC 3001 (CM 310) Formal Languages and Automata Theory (Foundations of Computation) (3 sem. cr.)
Students review logic and set theory, functions and relations, formal languages and grammars, finite-state automata, pushdown automata, and Turing machine.

NCSC 3011 (AD 310) Data Structures and Algorithms (3 sem. cr.)
This course covers fundamental data structures: arrays, lists, stacks, queues, trees (unbalanced and balanced), sets—both general (skip lists, hashing, tries) and restricted (priority queues, disjoint sets), and graphs. It provides students with an introduction to the principles of software engineering.

NCSC 3101 (CS 340) Introduction to Operating Systems (3 sem. cr.)
This course examines the important problems in operating system design and implementation. The operating system provides a well-known, convenient, and efficient interface between user programs and the bare hardware of the computer on which they run. The operating system is responsible for sharing resources (e.g., disks, networks, and processors), providing common services needed by many different programs (e.g., file services, the ability to start or stop processes, and printer access), and protecting individual programs from one another. The course starts with a brief historical perspective of the evolution of operating systems over the last 50 years, and then covers the major components of most operating systems. This discussion covers the tradeoffs that can be made between performance and functionality during the design and implementation of an operating system. Particular emphasis is given to three major OS subsystems: process management (processes, threads, CPU scheduling,
synchronization, and deadlock), memory management (segmentation, paging, swapping), and file systems and operating system support for distributed systems.

**NCSC 3201 Discrete Mathematics for Computer Science II (3 sem. cr.)**
This course extends the material covered in NCSC 2201 Discrete Mathematics for Computer Science I. It considers further topics in counting techniques, recurrence relations, generating functions, graph theory, and combinatorics.

**NCSC 6002 Computability and Complexity (3 sem. cr.)**
This course addresses concepts related to theoretical limits on computational solutions to inherently complex or undecidable problems. Topics include the Church-Turing hypothesis; decidability, the halting problem; time and space complexity; intractability; and NP completeness.

**NCSC 6021 (AD 720) Analysis of Algorithms (3 sem. cr.)**
Students learn techniques for algorithm complexity analysis and important design paradigms, such as divide-and-conquer, dynamic programming, and the greedy method, with many practical examples. The course covers efficient algorithms for problems in areas such as sorting, searching, graph theory, computational geometry, and algebraic and numeric algorithms. It also introduces complexity classes and problem reductions.

**NCSC 6025 (AD 726) Genetic Algorithms (3 sem. cr.)**
Genetic algorithms are search procedures based on the mechanics of natural genetics and natural selection. They combine a Darwinian survival-of-the-fittest with recombination and other genetic operators to form a search mechanism with surprising breadth of application and efficiency. Genetic algorithms have been applied to such diverse areas as computer-aided design, communications network design, VLSI layout, immune system simulation, the prisoner’s dilemma problem, neural network adaptation and design, protein folding and chemometrics, and horse-race handicapping. Genetic algorithms are also receiving greater attention in machine learning, where they can be used in classifier systems, a form of learning expert systems, or in genetic programming, where the genetic algorithm discovers better computing programs for performing the task at hand. Students explore the theory and application of genetic algorithms and other forms of evolutionary computation.

**NCSC 6031 (CA 720) Introduction to Parallel Computing (3 sem. cr.)**
Parallel processing has matured to the point where it has begun to make a considerable impact on the computer marketplace. This course seeks to equip students to specify, design, and evaluate parallel architectures for special-purpose and general-purpose applications.

**NCSC 6041 (ST 765) Cryptography (3 sem. cr.)**
This course includes a detailed examination of networking standards, protocols, and their implementation. Students explore the TCP/IP protocol suite, network application protocols, IP routing, and network security issues. Laboratory experiments are emphasized.

**NCSC 6101 (CS 740) Operating Systems Principles (3 sem. cr.)**
This course is concerned with the principles and practice of modern operating systems. Students examine core operating system principles: kernel design, processes and threads, concurrency and synchronization, deadlock, resource management, memory management and virtual memory, I/O and file systems, distributed file systems, protection, and security. They also examine the design and implementation of different operating systems features across a wide variety of systems, including UNIX-Linux, Solaris, Windows, and a teaching operating system called Nachos. They learn about the inner workings of the operating system, as well as the exposed systems programming interface. Several programming projects are used to gain hands-on experience with real operating systems issues.
NCSC 6121 (CS 720) Programming Language Principles (3 sem. cr.)
This course introduces students to programming language principles, including the history of programming languages, formal models for specifying languages, design goals, run-time structures, and implementation techniques, and a survey of the principal programming language paradigms.

NCSC 6161 Compilers (3 sem. cr.)
Students are introduced to the theory and techniques of processing programming language statements. The course includes the organization of a compiler, lexical scanner, syntax parser, symbol table, internal program representation, and code generation.

NCSC 6211 (CM 740) Numerical Analysis (3 sem. cr.)
This course covers the use of numerical techniques to solve mathematical problems. It includes interpolation, extrapolation, approximation, solutions of systems of equations, numerical integration and differentiation, and numerical solution of differential equations.

NCSC 6321 (ST 754) Internet Protocols (3 sem. cr.)
The Internet is one of the most important technical inventions of the last 50 years. In this course, students explore the TCP/IP family of protocols, including IP, UDP, TCP, routing, DNS, and ICMP. This course introduces several protocols: for each protocol, students discuss its function(s), messages, principles of operation, and design subtleties. Students also briefly review the application programming interface for distributed applications (i.e., sockets programming) and some factors in client/server design. Security is one of the design aspects repeatedly featured. Homework assignments include hands-on networking experiments. A project gives the opportunity to learn one protocol or property of the Internet in depth.

NCSC 6331 (CA 722) Computer Networks I (3 sem. cr.)
This course in an intensive study of the network architecture and its protocols. Topics include OSI and TCP/IP network architectures, analog and digital transmission, error correction and detection, data link protocols, multiplexing and switching, ADSL, HDSL, RADSL, SDSL, VDSL, cable networks, optical transmissions, Ethernet, fast Ethernet, Gbps Ethernet, wireless LANs, token bus, token ring, FDDI, DQDB, SMDS, ISDN and Broadband ISDN, X.25, Frame Relay, PPP, SONET/SDH, ATM, and various routing protocols.

NCSC 6332 (CC 784) Computer Networks II (3 sem. cr.)
In recent years, computer networks have been undergoing significant changes in their design principles, architectures, protocols, and application scenarios. Emerging networks are expected to carry diverse traffic types (e.g., video, audio, images, text), some of which have stringent delay and packet-loss transport requirements. Quality-of-service support has become a fundamental block in the design of intelligent networks. The exponential growth of the Web has made it critical to deploy Web caching mechanisms at end systems (clients and servers) as well as within the network. Network services have been extended to the wireless domain (e.g., via WiFi and Bluetooth), allowing for seamless wired/wireless connectivity based on cellular as well as ad hoc architectures. Sensor networking is emerging as an enabling technology for many exciting sensor-based application domains, including environment monitoring, seismic-structure response, and marine microorganisms. This course aims at exposing the fundamental techniques, algorithms, and protocols underlying the recent technological advances in the fields of wired and wireless networking. Much of the material is conceptual in nature, with some portion mathematically oriented. Programming-based mini-projects are used to reinforce certain design concepts, algorithms, and protocols.
NCSC 6333 (ST 759) Data Communication Networks (3 sem. cr.)
This course introduces fundamental concepts in the design and implementation of computer communication networks and their protocols.

NCSC 6401 (CS 750) Database Management Systems (3 sem. cr.)
This course helps students learn about the relational database management systems, a core technology for the information age. Students discuss database concepts underlying the important application domains of informed decision-making and work-flow automation.

NCSC 6402 Database Architectures and Design (3 sem. cr.)
Students explore design of databases, physical storage techniques, query processing and optimization, concurrency control, transaction management, disaster recovery, and security.

NCSC 6431 (CS 755) Distributed Database Systems (3 sem. cr.)
This course examines the architecture of distributed database management systems; data fragmentation, replication, and allocation; query optimization and transaction management; and distributed concurrency control.

NCSC 6441 Information Retrieval (3 sem. cr.)
This course examines the techniques used in the retrieval of information from text-based information systems. Topics include text representation, text indexing, vector spaces and probabilistic retrieval models, text statistics, document clustering, document filtering, and interface issues. Some topics related to Web searching include crawling, link-based algorithms, Web metadata, and collaborative filtering systems.

NCSC 6461 (CS 758) Data Mining (3 sem. cr.)
This course provides intermediate background in intelligent systems for graduate and advanced undergraduate students. Three topics are discussed: data mining and machine learning (including analytical and multistrategy learning, knowledge-driven learning, and inductive learning); pattern recognition using artificial neural networks and Bayesian networks; and genetic algorithms and evolutionary systems for KDD.

NCSC 6501 (IS 710) Artificial Intelligence I (3 sem. cr.)
This course covers the basic concepts involved in artificial intelligence, including a discussion of what is intelligence, the Turing Test, the programming language of Lisp, problem definition, problem-solving steps, proper attitudes for problem-solving, blind search methods, heuristic search methods, logic, semantic networks, production systems, frames, and scripts. Discussions of applications for these basic concepts are presented. These discussions include applications to natural knowledge processing, computer vision, modeling and representing knowledge, expert systems, and intelligent machines.

NCSC 6506 (IS 720) Knowledge System Engineering (3 sem. cr.)
This course provides a review and in-depth learning of the techniques used in engineering of knowledge systems, and their various applications to design, manufacturing, robotics, collaborative systems, software engineering, and network agents.

NCSC 6511 Artificial Life (3 sem. cr.)
This course examines the design and construction of software environments and organisms that are subject to mutation and selection pressures leading to evolution of the organisms. Such computational techniques find applications in the study of biology and social systems, and the study of self-evolving software.
NCSC 6521 Expert Systems (3 sem. cr.)
This course introduces the concepts and techniques used to build software programs that provide expert analysis and decision-making in some specific task area. It covers analysis of program requirements, capture of knowledge from a human expert in the task area, and design and implementation of a software system to replicate the expert’s performance on task.

NCSC 6526 (IS 755) Artificial Agents (3 sem. cr.)
This course examines theories of intelligent agents. It includes agent architectures; knowledge representation, communication, cooperation, and negotiation among multiple agents; planning and learning; issues in designing agents with a physical body; dealing with sensors and actuators; and world modeling.

NCSC 6531 Pattern Recognition (3 sem. cr.)
Students explore the selection and measurement of recurrent features, classification techniques using statistical and non-statistical methods, data clustering, and syntactical and mathematical pattern recognition.

NCSC 6541 Natural Language Processing (3 sem. cr.)
This course introduces techniques used to recognize and generate spoken languages.

NCSC 6551 (CT 780) Robotics (3 sem. cr.)
In addition to traditions rooted in mechanics and dynamics, geometrical reasoning, and artificial intelligence, the study of robot systems is growing to include many issues traditionally part of the computing sciences: distributed and adaptive control, architecture, software engineering, real-time systems, and information processing and learning. In robotics, processing and its relationship to mechanical function are dependent on the target platform and the world in which it is situated. Designing an embedded computational system for sensory and motor processes requires that designers appreciate and understand all of these disciplines. This course is concerned with the design and analysis of adaptive, closed-loop physical systems. It focuses on sensory and motor systems that interpret and manipulate their environments. Toward this end, students examine mechanisms (kinematics and dynamics), actuators, sensors (with a focus on machine vision), signal processing, associative memory, feedback control theory, supervised and unsupervised learning, and task planning. Interesting examples of integrated sensory, motor, and computational systems can be found in nature, so occasionally students relate the subject matter to biological systems. Students experiment with system identification and control, image processing, path planning, and learning on simulated platforms to reinforce the material presented in class.

NCSC 6561 Computer Vision (3 sem. cr.)
This course introduces machine recognition of images, edge detection, perspective transformations, image segmentation and filtering, shape recovery, and stereo vision. Some applications of the technology are discussed.

NCSC 6571 (IS 794) Machine Learning (3 sem. cr.)
Students learn the main methods of designing and analyzing algorithms for controlling engineering systems that must learn how to perform sequential tasks on the basis of simple reinforcement feedback provided only at task endings. The course methods apply, for example, to machine learning of the following challenges: the least-cost route through a network, the best way to assign channels among interacting regions of a large multiregion cellular phone network, the best policy for a constrained elevator-car dispatcher to follow in a large multi-car office building, the best schedule for factory manufacturing jobs that satisfy precedence constraints and that draw on limited pools of resources, the best way to time traffic light switches, and optimal computer game strategies.
NCSC 6581 (IS 773) Neural Computation (3 sem. cr.)
Students learn to understand and use the various kinds of neural networks currently in use.

NCSC 6601 Human Computer Interaction (3 sem. cr.)
Students examine how the interaction of people with computers may be made more effective and efficient. The course introduces the theory of human interaction modalities, technology interfaces, and information representation.

NCSC 6621 User Interface Design (3 sem. cr.)
This course introduces the theory, design, implementation, and evaluation of user interfaces for interactive computer applications. It also introduces GUI toolkits, event processing, resource management, data visualization, and interface prototyping and construction.

NCSC 6701 (ST 540) Computer Graphics I (3 sem. cr.)
Students learn the principles and practices associated with computer-generated images. Graphics hardware, graphics models and algorithms for displaying graphics primitives, objectives, and images are studied. Algorithms for filling and clipping polygons, for the transformation and display of two- and three-dimensional images, are presented. The design and implementation of graphical user interfaces, the removal of hidden edges, and the generation of curves are also covered.

NCSC 6702 (ST 741) Computer Graphics II (3 sem. cr.)
The emphasis of this course is on raster graphics, hidden-surface algorithms, and a close look at ray-tracing algorithms for realistic image synthesis. Some problems in computer-aided design are treated.

NCSC 6811 (ST 731) Simulation and Modeling (3 sem. cr.)
Abstraction for creating models is discussed. Simulation of processes, discrete event scheduling, process interaction, and continuous modeling techniques are explored. Also included are probability and statistics related to simulation parameters including run length, inference, design of experiments, variance reduction, and stopping rules.

NCSC 6831 (CS 765) Distributed Computing Systems (3 sem. cr.)
This course examines the design and analysis of distributed systems, the development and implementation of distributed applications running on a network of workstations, high-speed protocols, host network interface designs, distributed operating systems, distributed file systems, load balancing and scheduling, and distributed programming paradigms.

NCSC 6834 Grid Computing (3 sem. cr.)
This course provides an introduction to computational grids. Computational grids provide a seamless integration of geographically dispersed computing resources connected by high-speed wide-area networks to deliver scalable performance for large computing applications.

NCSC 6837 Pervasive Computing (3 sem. cr.)
This course covers principles and applications associated with the utilization of computing and sensing devices in a distributed environment. Pervasive computing deals with access to and processing of information using a variety of computing platforms, communication technologies, and I/O modalities. Issues explored may also include wide variability in available bandwidth, changing network topologies, impact of limited power sources (batteries) for computation, communications security, and data fusion.
NCSC 6841 (ST 760) Computer and Network Security I (3 sem. cr.)
Students cover practical topics in modern network security: risk assessment, policy and mechanism, malicious code, intrusion prevention/detection/response, and network applications. The emphasis is on the tradeoffs between risk of misuse, cost of prevention, and societal issues. Concepts are implemented in programming projects.

NCSC 6842 Computer and Network Security II (3 sem. cr.)
This course examines trust aspects of platforms underlying computing applications. It considers approaches that may be utilized to build secure operating systems and databases. It also briefly considers computer forensics, such as ways to uncover, protect, and exploit evidence of digital tampering.

NCSC 6843 Information Assurance (3 sem. cr.)
This course looks at techniques associated with establishing the validity of information managed by computer systems. It also considers assurance of practices used to manage information systems as well as those associated with the use of information systems.

NCSC 8011 (AD 711) Advanced Data Structures (3 sem. cr.)
This course develops efficient data structures used to obtain more efficient solutions to classical problems, such as those based on graph theoretical models, as well as problems that arise in application areas of contemporary interest.

NCSC 8021 Parallel and Combinatorial Algorithms (3 sem. cr.)
This course covers material on algorithms for parallel computation, data structures, graph algorithms, geometric algorithms, approximate counting, random walks, number-theoretic algorithms, derandomization techniques, and probabilistic analysis of algorithms.

NCSC 8071 Computational Biology (3 sem. cr.)
This course introduces students to DNA computing, DNA chips, DNA nanoassembly and molecular electronics, and bioinformatics.

NCSC 8081 Quantum Computation (3 sem. cr.)
Topics covered in this course include fault-tolerant quantum computing, quantum error-correcting codes, security of quantum key distribution, and security of other quantum protocols such as coin flipping.

NCSC 8101 Advanced Operating Systems (3 sem. cr.)
Students learn theory of operating systems design. The course covers distributed and multiprocessor systems, as well as the evaluation of operating system performance.

NCSC 8401 Advanced Database Systems (3 sem. cr.)
This course explores the architecture and implementation of distributed databases, distributed query optimization, and transaction management. Students are introduced to databases for geographic, multimedia, and object data.

NCSC 8841 Advanced Security Techniques for Information Networks (3 sem. cr.)
This course examines security issues arising in computer networks. It considers node and service authentication, address spoofing, hijacking, sniffing, and routing tricks; it also considers intrusion detection and counter measures, and hardening of operating systems.
NEEC

NEEC 3501 Signals and Systems (3 sem. cr.)
This course covers basic techniques applied in signal processing, communications, and control systems; time and frequency models; Fourier-domain representation; discrete-time signal and system analysis; Z transform; state models; stability; feedback; sampling; and filtering.

NEEC 3641 (EM 341) Electromagnetics (3 sem. cr.)
Students learn about Faraday’s law of electromagnetic induction, displacement current, and Maxwell’s equations for time-varying fields, as well as the wave equation and the plane electromagnetic wave. They explore reflection and transmission from plane interfaces at normal and oblique incidence, transmission lines under transient and sinusoidal steady-state conditions, and the Smith chart. Topics in guided waves, resonators, radiation, and antennas are also included.

NEEC 6366 (EM 736) Active Microwave Circuits (3 sem. cr.)
This course includes the design of narrow-band amplifiers, noise and design of low-noise amplifiers, design of various types of broadband amplifiers, oscillators, and other nonlinear circuits.

NEEC 6501 (CC 714) Random Processes for Engineering Applications (3 sem. cr.)
Students learn about probability, random variables, stochastic processes, correlation functions, and spectra with applications to communications, control, and computers.

NEEC 6505 (CC 731) Estimation Theory (3 sem. cr.)
This course explores parameter estimation and state estimation techniques, including least squares, BLUE, maximum likelihood, maximum a posteriori, mean-squared prediction, Kalman-filtering, mean-squared smoothing, extended Kalman filtering, and higher order statistics.

NEEC 6511 Network Design, Modeling, and Simulation (3 sem. cr.)
This course examines the mathematical techniques associated with modeling communication networks and simulating the performance of such networks on a computer. Modeling and simulation are used to examine network performance under various loading levels and subject to different types of perturbation. The efficiency and reliability of different network topologies are examined.

NEEC 6521 (CC 511) Communications Systems I (3 sem. cr.)
This course involves the study of digital communication systems. Various modulation formats and receiver designs are considered. Some topics in source coding and error-correcting coding are covered.

NEEC 6522 (CC 715) Communications Systems II (3 sem. cr.)
This course is a comprehensive introduction to the design and analysis of modern digital communication systems. The communication techniques covered are employed in all state-of-the art systems, including cellular telephones, digital video broadcasting, and high-speed Internet access lines. The characteristics of a variety of common communication channels are discussed. Important baseband and passband modulation techniques are described. Optimal demodulation techniques are presented, and their performance is compared. Key information-theoretic concepts, including entropy and channel capacity, are introduced. Channel-coding techniques based on block, convolutional, and trellis codes are presented. Equalization techniques, which are essential on channels exhibiting intersymbol interference, are described.
NEEC 6525 (CC 718) Wireless Networks (3 sem. cr.)
This course covers the fundamentals of wireless networks and design. Topics include cellular concepts and design, multiple access control protocols, wireless networking, handoff management, mobility management, resource allocation, and wireless systems and standards.

NEEC 6527 (CC 781) Spread Spectrum Systems (3 sem. cr.)
This course is an introduction to spread spectrum systems for military and commercial applications.

NEEC 6551 (CC 560) Digital Signal Processing I (3 sem. cr.)
This course introduces students to the concepts, techniques, and applications of digital signal processing (DSP) via the context of a real-time DSP system for the filtering of analog signals. The central relationship of a digital filter’s frequency response to the frequency response of an equivalent analog filter is established using time and frequency domain models for analog-to-digital and digital-to-analog conversion. A discussion of oversampling as a means of shifting the workload in a real-time DSP system from analog to digital filtering is used to introduce detailed time and frequency domain models of downsampling and upsampling. Techniques for the design of a digital filter’s frequency response are presented in view of the various tradeoffs (linear phase, arithmetic complexity, coefficient quantization, arithmetic quantization) between practically realizable implementations of infinite impulse response and finite impulse response filters. The Discrete Fourier Transform (DFT) and Fast Fourier Transform algorithms are introduced as a practical means of frequency analysis, particularly in the context of examining a digital filter’s frequency response during the design process. The relationship of the DFT to the multidimensional DFT, the Discrete Cosine Transform, the Time Dependent Fourier Transform, and the Complex Cepstrum are also discussed.

NEEC 6552 (CC 763) Digital Signal Processing II (3 sem. cr.)
This course is an introduction to the advanced signal processing methods that are used in a variety of application areas.

NEEC 6555 (CR 551) Analog Signal Processing and Filtering (3 sem. cr.)
This course explores the approximation of magnitude, phase, and delay characteristics; design of passive, active, and switched capacitor filters; effects of op amp parasitics; sensitivity and gain bandwidth; and optimization of design.

NEEC 6556 (CC 760) Analog and Digital Filter Design (3 sem. cr.)
This course includes the approximation and analog design of Butterworth, Chebychev, and Bessel filters, and the basic frequency transformations for designing low pass, bandpass, band reject, and high pass filters. Also included is the concept of sensitivity in filter design. Students examine the design of IIR digital filters using impulse invariant and bilinear transformations and the design of FIR digital filters using frequency sampling and window methods. The course also covers canonical realization of FIR digital filters, wave digital filters, and an introduction to two-dimensional filters.

NEEC 6557 (CC 764) VLSI Signal Processing (3 sem. cr.)
This course aims to convey knowledge of advanced concepts in VLSI signal processing. Emphasis is on the architectural exploration, design, and optimization of signal processing systems for communications. The focus is in the exciting and exploding field of systems for wireless communications. Basic principles are applied to the architectural exploration and implementation of complete wireless systems, including all aspects of design problems such as analog digital tradeoffs, synchronization, modulation, equalization, and error correction.
NEEC 6561 Digital Audio Processing (3 sem. cr.)
This course considers digital processing of audio signals. It looks at both speech and non-vocal signals. Topics include identification and extraction of speech features, speech compression and recognition, filtering, noise reduction, selective frequency enhancement, and frequency synthesis.

NEEC 6565 Digital Image Processing (3 sem. cr.)
This course provides an introduction to digital image processing. Topics include two-dimensional Fourier Transform, quantization, image enhancement and image transforms, two-dimensional Wiener and two-dimensional Kalman filters, image compression schemes including lossless compression, wavelet transforms and compression, and image reconstruction.

NEEC 6571 (CC 740) Error-Correcting Codes (3 sem. cr.)
This course examines abstract algebra, block coding and decoding techniques, convolutional coding and decoding techniques, and combined modulation and coding (trellis-coded modulation).

NEEC 6573 Data Compression (3 sem. cr.)
This course examines the techniques used to design compression systems for general signal, audio, or video data. Lossless compression methods and coding techniques such as Shannon codes, Huffman codes, and nonbinary codes are covered. Lossy compression techniques and various quantization methods, transform-based methods, vector quantizer models, lattice, and multistage quantization are also covered.

NEEC 6575 (CC 745) Information Theory (3 sem. cr.)
Students define a measure of information and study its properties. This course introduces channel capacity and error-free communications over noisy channels, rate distortion theory, and error detecting and correcting codes.

NEEC 6605 (EM 715) Optical Detectors and Detector Systems (3 sem. cr.)
This course covers topics such as photoconductors, semiconductors, signal and noise mechanisms, figures of merit, limitations on the sensitivity of detectors, orbital mechanics, infrared system SNR calculations, and optical design considerations in spectrometers.

NEEC 6606 (IC 717) Semiconductor Lasers and LEDs (3 sem. cr.)
This course covers optical processes in semiconductors, spontaneous emission, absorption, gain, and stimulated emission. Students explore principles of light-emitting diodes, including transient effects, and spectral and spatial radiation fields. They also examine principles of semiconducting lasers, including gain-current relationships, radiation fields, optical confinement, and transient effects.

NEEC 6608 (EM 732) Microwave Devices and Circuits (3 sem. cr.)
Principles of device operation and circuit characteristics are described for the microwave IMPATT, TRAPATT, Gunn diode, varactor diode, p-i-n diode, tunnel diode, bipolar transistor, and field effect transistor. Wave guide circuits, striplines, and microwave integrated circuits are covered.

NEEC 6631 (EM 722) Integrated Optics and Nanophotonics (3 sem. cr.)
The basic goals, principles, and techniques of integrated optics are discussed. The course emphasizes physical explanations of how devices and systems work rather than on elaborate mathematical models.

NEEC 6635 (EM 513) Fiber Communications and Systems (3 sem. cr.)
Fiber optics is a rapidly growing technology for ground-based communications systems. This course is intended to provide students with a background in the topics required to understand key elements of fiber optic communications systems. A proper background includes exposure to both the physical principals of optical signal generation, transmission, and detection, and the communications theory aspects of this
problem. The course is divided into three modules. The first covers physical parameters related to fiber optic devices, and the second covers communication aspects of optical fiber systems. Each of these sections is followed by an exam. The third segment of the course covers fiber optic systems. During the third segment, students are expected to work on a system design project in which they incorporate concepts they’ve learned earlier in the course.

**NEEC 6651 (EM 750) Antenna Theory and Design (3 sem. cr.)**
In this course, students learn how to use standard antenna characterization parameters, such as gain, directivity, impedance, bandwidth, and efficiency. They also learn about electromagnetic radiation from currents and how to compute radiation from several common antenna structures. Students design simple antennas, such as dipoles, microstrip patches, and waveguide horns, to achieve specified performance; they also design antenna arrays with required radiation pattern characteristics. Students gain understanding of self-impedance and mutual impedance, and the use of MoM numerical analysis for antenna simulation. After completing the course, students will be able to critically evaluate requirements and potential design options for antenna applications.

**NEEC 6661 (EM 530) Microwave Engineering I (3 sem. cr.)**
A review of basic electromagnetic theory is followed by the study of conventional microwave waveguides and transmission lines, such as microstrip and stripline. The matching of microwave circuits is discussed and small reflection theory is used to analyze microwave transformers. The use of MDS software to analyze microwave circuits is demonstrated. General microwave analysis techniques are developed to handle general multiport networks. Signal flow graphs are also used to understand modern microwave measurements techniques.

**NEEC 6662 (EM 531) Microwave Engineering II (3 sem. cr.)**
Passive microwave devices such as phase shifters, power dividers, directional couplers, hybrids, isolators, circulators, filters, mixers, and detectors are studied in this course. Active microwave amplifier design and system noise are also covered. The principles of microwave communication systems, radars, and radiometers are discussed.

**NEEC 6663 (EM 735) Microwave and RF Wireless Systems (3 sem. cr.)**
This course focuses on RF portions of modern wireless telecommunications and data transmission systems. RF subsystems, including modulators, phase-locked loops, and related components, are predominantly analog in nature, in contrast to the extensive use of digital technology elsewhere in wireless systems.

**NEEC 6701 (CT 520) Feedback Control Systems (3 sem. cr.)**
This represents a first course in control theory. Students begin with an introduction to the theory of feedback control systems. Next, they discuss emphasizing control of linear, time invariant, and continuous time systems. Much of the remainder of the course deals with classical frequency domain techniques for analysis and design.

**NEEC 6711 (CT 712) Linear Systems Theory (3 sem. cr.)**
This course examines mathematical descriptions of linear systems, state-variable models, analysis methods, stability, controllability and observability, state feedback techniques, and design of feedback controllers and observers.

**NEEC 8551 (CC 766) Adaptive Signal Processing (3 sem. cr.)**
Students explore Wiener filtering, linear prediction, methods of steepest descent, stochastic gradient algorithms, recursive least-squares (RLS) algorithms, fast RLS methods, RLS with systolic arrays, QRD-least squares methods, and blind deconvolution.
NEEI

**NEEI 2321 (CR 310) Introduction to Electrical Circuits (3 sem. cr.)**
This is an introductory course in circuits. It introduces simple resistive circuits, Kirchoff’s laws, two- and three-terminal devices, independent and dependent voltage and current sources, BJTs and FETS, op-amps, linearity in circuits, and sinusoidal steady-state behavior.

**NEEI 2322 Linear Systems and Circuits (3 sem. cr.)**
Students analyze linear systems, time domain modeling of linear systems with differential equations, Laplace transform, Fourier transform and frequency domain modeling, and high frequency models of diodes and transistors. They also examine multistage amplifiers, frequency response of amplifiers, and simple filters.

**NEEI 3301 (IC 327) Introduction to Semiconductor Devices (3 sem. cr.)**
This course covers elementary semiconductor physics, physical and electrical characteristics of pn junctions, bipolar junction transistors, and field-effect transistors.

**NEEI 3321 Analog and Digital Electronics (3 sem. cr.)**
This course includes active circuits, feedback amplifiers, oscillators, stability and compensation, switching devices, design of logic gates, sequential circuits, and digital circuits.

**NEEI 6301 (IC 520) Integrated Circuit Devices (3 sem. cr.)**
This course covers basic solid-state physics concepts involving crystal structure and the principles of quantum physics as it applies to semiconductor devices. It covers the essentials of semiconductor physics, including band diagrams, electrons and holes, density of states, Fermi statistics, carrier drift, and diffusion. Students apply these concepts to pn junction diodes and metal semiconductor junctions. This course also provides an overview of MOS and bipolar devices in terms of current-voltage and capacitance-voltage behavior, as well as scaling issues. It covers basic circuit models and reliability physics. It also describes the operation and design issues of Si integrated circuits, points out applications, and discusses some process integration, reliability, and testing issues. It also describes the operation and design issues of optoelectronic detectors and sources.

**NEEI 6302 (IC 724) Principles and Characteristics of MOS Devices (4 sem. cr.)**
This is a second-level graduate course that helps students build a strong theoretical foundation, as well as an intuitive understanding, of the most important behaviors of MOSFETs. Topics are chosen to highlight the limitations and promises of aggressively scaled MOSFETs; many examples are taken from the critical issues facing the semiconductor industry. Content of the course emphasizes the physical principles and operational characteristics of semiconductor devices and modeling for circuit design, high-field, and hot carrier effects. There is advanced discussion of field-effect transistors with an emphasis on the behavior dictated by present and probable future technologies. The course is suitable for junior as well as experienced engineers.

**NEEI 6305 Heterostructure Devices (3 sem. cr.)**
Students explore the physics of junctions formed by dissimilar materials, physical and electrical characteristics of devices made from heterojunctions, device fabrication processes, and applications.

**NEEI 6311 (IC 727) Semiconductor Device Modeling (3 sem. cr.)**
This course offers an introduction to numerical modeling of semiconductor devices. Today, computer-aided design has become an affordable and, in fact, necessary tool for designing contemporary
semiconductor devices. With emphasis on numerical methods, this course provides basic concepts and design tools for analyzing discrete two-dimensional devices such as Schottky diodes, MESFETs, MOSFETs, BJTs, and HBTs.

**NEEI 6315 (IC 752) Computer-Aided Engineering for Integrated Circuits (3 sem. cr.)**
This course discusses CAD systems for integrated circuits; terminal models of bipolar and MOS devices; high-speed interconnect modeling; computerized circuit analysis (methods and programs); SPICE simulation; driver-line interaction; IBIS techniques; behavioral modeling of mixed-signal circuits; signal integrity in centralized and asynchronous clocking systems; timing equations; and phase noise of oscillators, clock jitter, and its evaluation via simulation.

**NEEI 6321 (CR 526) Analysis of Electronic Circuits (3 sem. cr.)**
This course emphasizes obtaining analytical approximations for maximum insight into circuit behavior. Students explore extra element theorem, feedback theorem, low-entropy design equations, frequency-domain measurement of loop gains, and impedances.

**NEEI 6331 (IC 570) Linear Integrated Circuits (4 sem. cr.)**
This course covers the fundamentals of the analysis and design of analog integrated circuits. It is geared towards those with limited or no background in analog integrated circuits, and provides a thorough introduction to this material. It begins by reviewing transistor device models, progresses to single and two-stage amplifiers, and moves on to multistage amplifiers. A variety of techniques for implementing current sources and temperature and supply-independent bias sources are covered, as well as the tradeoffs between them. The class then focuses on feedback theory and application, and frequency response of linear analog circuits and the design of operational amplifiers. MOS is the primary focus; there is some discussion of bipolar. By the end of this course, the student should have a firm grasp of the fundamental analysis and design techniques required for the proper design and implementation of analog integrated circuits.

**NEEI 6332 (IC 771) Advanced Analog Integrated Circuits (3 sem. cr.)**
This course is an advanced analog integrated circuits class. While basic theory is covered/reviewed during the class, emphasis is placed on practical design issues that face today’s analog design engineers. Both bipolar and MOS circuits are covered, but the emphasis is on MOS, which reflects the needs of the majority of today’s mixed-signal integrated circuits. Starting with the characteristics of active and passive devices available in modern integrated circuit technologies, the course covers the basic building blocks used in mixed-signal chips: current sources and references, operational transconductance amplifiers, switches, and switched-capacitor gain stages and integrators. The course ends with advanced topics such as correlated double sampling and chopper stabilization. Emphasis is placed on a design methodology that takes into consideration device non-idealities, including MOS short-channel effects and mismatch, thermal and flicker noise, as well as substrate and power supply noise coupling. The goal of this course is to provide the student with a working repertoire of dynamic design techniques. In the process, students hone and develop the fundamental analyses skills necessary for engineering design success.

**NEEI 6341 (IC 541) Introduction to Digital Integrated Circuits (4 sem cr.)**
This course covers CMOS devices and manufacturing technology along with CMOS inverters and gates. Other topics include propagation delay, noise margins, power dissipation, and sequential circuits. Students look at various design styles and architectures, as well as the issues that designers must face, such as technology scaling and the impact of interconnect. Examples presented in class include arithmetic circuits, semiconductor memories, and other novel circuits. The course starts with a detailed description and analysis of the core digital design block, the inverter. Implementations in CMOS are discussed. Next, students discuss the design of more complex combinational gates, such as NAND, NOR, and EXORs, looking at optimizing the robustness, speed, area, and/or power. Students apply the techniques they learn
on more evolved designs, such as adders and multipliers. The influence of interconnect parasitics on circuit performance and approaches to cope with them are treated in detail. Substantial attention is devoted to sequential circuits, clocking approaches, and memories. The course concludes with an examination of design methodologies. CAD tools for layout, extraction, and simulation are used for assignments, labs, and projects.

**NEEI 6342 (IC 742) Advanced Digital Integrated Circuits (3 sem. cr.)**

The advent of deep sub-micron technologies poses a number of profound challenges to the designer of advanced digital integrated circuits, such as microprocessors, wireless communications, multimedia processors, and ASICs. This course identifies the compelling issues facing the designer of the next decade and presents both analysis and solution techniques. Topics include the perspective and impact of technology scaling, high-performance and low-power design, timing and synchronization techniques, signal integrity, interconnect, reconfigurable logic, and memory design.

**NEEI 6351 (IC 776) Analysis and Design of VLSI Analog-Digital Interface Integrated Circuits (3 sem. cr.)**

This course covers many aspects of the design of integrated analog and analog-digital interface electronics in CMOS technology at the block and system levels. Specific topics include continuous-time and sampled data filters, oversampled analog-digital converters, and Nyquist rate analog-digital and digital-analog converters. Problem-specific CAD tools such as MATLAB (filter design), Simulink (conversion system simulator), and HSPICE are used extensively. The course covers the specification, design, and test of analog-digital and digital-analog converters. Both system- and circuit-level issues are addressed, and several sample converter implementations are analyzed in detail. Extensive use is made of system- and circuit-level simulations in assignments.

**NEEI 6361 (IC 574) Integrated Circuits for Communications (4 sem. cr.)**

This course covers analog circuits for communications, with primary emphasis on nonlinear analog integrated circuits. The course begins by reviewing transistor devices and the distortion caused by them. More general distortion analysis techniques are developed, and the various types of distortion are analyzed. The latter portion of the course is an in-depth analysis of nonlinear circuits with applications in the communications domain, and the design thereof, including various oscillators, mixers, multipliers, phase-locked loops, detectors, and rectifiers. At the end of the course, students should have a good understanding of basic distortion analysis techniques and should demonstrate good fundamentals in the analysis and implementation of nonlinear analog circuits for communication applications.

**NEEI 6362 (IC 775) Advanced Integrated Circuits for Communications (3 sem. cr.)**

This course covers analog integrated circuits for communications applications with a particular emphasis on nonlinear circuits. Basic theory is reviewed briefly; the bulk of the course is spent evaluating and designing circuits, covering a broad spectrum—from desirable nonlinear functions to ultra-linear design to oscillators. A substantial portion of the course is spent developing theory for distortion. The material covered is predominantly lecture material.

**NEEI 6371 (IC 534) Microelectronics Test Engineering (3 sem. cr.)**

The course emphasizes test engineering, as practiced by the CMOS manufacturing industry. The major test topics are the following: (a) digital integrated circuit testing with emphasis on automatic test equipment operation, and particularly details of the major test performed; (b) mixed-signal testing with emphasis on the peculiar problems, how these are addressed, and knowledge of the sampling theory required to understand mixed-signal testing; and (c) the modern defect-based test approach. More detailed digital topics include opens/shorts testing, functional and digital circuit and analog circuit parameter testing, test vector development, and trouble-shooting. The mixed-signal lectures include analog part specifications, analog-digital and digital-analog converter static measurements, sampling theory (with
tutorial CD-ROM), analog-digital and digital-analog converter dynamic parameters, and general mixed-signal test issues. The defect-based test material includes electronic properties of CMOS defects (bridges, opens, and parametric failures), test method electronic properties, statistical analysis in test limit setting, and system-on-chip test planning.

**NEEI 6401 (IC 510) Introduction to Semiconductors (3 sem. cr.)**
This course covers basic semiconductor properties, elemental quantum mechanics, energy band theory, equilibrium carrier statistics, and carrier transport. It emphasizes Si, Ge, and GaAs. The course is intended for junior- and senior-level undergraduate students and beginning graduate students.

**NEEI 8301 Nanoelectronic Devices (3 sem. cr.)**
This course in an introduction to electronic devices with dimensions on the order of nanometers. It discusses physical and electrical characteristics, quantum effects due to reduced sizes and repeating structures, quantum wells, molecular electronic devices, applications, and fabrication technology.

**NEEM**

**NEEM 3401 Introduction to Solid-State Physics (3 sem. cr.)**
This course covers crystal lattices, electrons and holes, energy band structure, metals, semiconductors, and insulators.

**NEEM 6401 Semiconductor Physics (3 sem. cr.)**
In this course, students learn about the properties of semiconductors, band structure, direct and indirect band gaps, Fermi surface, doping, electrical junctions, charge injection, charge transport in semiconductors, scattering, carrier statistics, optical properties, and generation and recombination kinetics.

**NEEM 6405 (EP 741) Defects in Semiconductors (3 sem. cr.)**
This course explores the thermodynamics of vacancies and interstitials, defect complexes, electronic defects, defect annealing processes, transient diffusion, self-diffusion, dopant and impurity diffusion, substitutional/interstitial diffusion, diffusion in amorphous solids, electro transport, fundamentals of ion-solid interactions, semiconductor doping atomic structure of defects, damage annealing, ion beam mixing phenomena, ion implementation and rapid thermal annealing processes, and shallow junctions and devices.

**NEEM 6414 (IC 715) Optical Properties of Solids (3 sem. cr.)**
This is an introductory course in the field of solid-state optoelectronics. It includes an introduction to the microscopic properties of semiconductor systems, such as bulk semiconductors and semiconductor heterostructures, as well as their linear and nonlinear optical response. It also contains a discussion of basic operation principles of optoelectronic devices, such as lasers, light modulators, and detectors. Some topics are covered in detail (e.g., the linear optical response of solids, simple optical properties of phonons, the physics of quantum wells), whereas other topics are covered only in the form of a general overview (e.g., nonlinear optical effects).

**NEEM 6421 (EP 724) Synthesis and Characterization of Electronic Materials (3 sem. cr.)**
Students learn principles of materials growth and characterization in electronic and photonic industries. The course includes bulk and epitaxial growth technologies, and corresponding characterization methods for evaluation and quality control, as well as the theoretical bases for these techniques.
NEEM 6431 (IC 730) Microelectronics Processing I (3 sem. cr.)
This course is an introduction to the bipolar and MOSFET semiconductor process. Students learn about the theory and practice of the major unit processes used in modern silicon device processing: oxidation; diffusion; ion implantation; Deep-UV, phase-shift, UV, electron and X-ray lithography; metal and oxide deposition; aqueous, plasma, and reactive ion etching; chemical mechanical polishing; and wet-cleaning for front-end- and back-end-of-the-line. Students explore issues relating to performance integration, the effects of subsequent and prior process steps on a fabrication sequence, and the limitation of process steps in producing devices for the Gigabit era.

NEEM 6432 (EP 725) Microelectronics Processing II (3 sem. cr.)
Students explore issues such as the control of dopant profiles for the formation of shallow junctions needed for submicron devices; microstructural engineering to utilize ion implantation defect microstructures; low-resistivity ohmic contacts; thin oxides with desired electrical properties; and impurity precipitation and electromigration phenomena, including materials science principles and their applications. Physical properties of materials in small dimensions are expected to be frequently quite different from the bulk properties. This course deals with microscopic properties and correlation of microstructures in submicron regions with corresponding physical properties.

NEEM 6433 (IC 734) Plasma-Assisted Microelectronics Processing (3 sem. cr.)
In this course, students develop a basic knowledge of plasma processing physics and chemistry. The course surveys state-of-the-art plasma processing technology, including high-density plasma sources, plasma diagnostic techniques, and numerical modeling. Several examples of industrial plasma processes are covered in depth, including silicon sub-micrometer etching, III–V semiconductor etching, and plasma-assisted chemical vapor deposition of diamonds.

NEEM 6434 (IC 736) Thin Film Deposition for Semiconductor Devices (3 sem. cr.)
Students utilize kinetic theory to calculate basic properties of gases and vapors; model vacuum system pumping dynamics; calculate vapor pressure and describe adsorption phenomena; model beam intensity of evaporation sources; describe a practical sputtering plasma and model sputtering discharges; describe sputter yield data and develop a simplified collisional model; derive the deposition flux at the substrate and model film thickness distributions; and model the production of condensable vapors and deposition fluxes provided by cathodic arc, pulsed laser, and cluster beam sources.

NEEM 6437 Compound Semiconductor Device Fabrication (3 sem. cr.)
This course covers device and circuit fabrication technology for GaAs and other III–V and II–VI materials, layer epitaxy, film deposition, dopants, etching, and ohmic and non-ohmic contacts.

NEEM 6441 (IC 792) MEMS Technology and Devices (3 sem. cr.)
The course provides a summary of integrated circuit fabrication technologies then goes into an overview of the technologies available to shape electromechanical elements on a submillimeter scale. Physics of MEMS devices are covered at a level necessary to design and analyze new devices and systems. Several commercially available MEMS processes are discussed in detail, and students design final projects in these processes.

NEEM 6451 (IC 714) Semiconductor Material and Device Characterization (3 sem. cr.)
This course includes electrical, optical, electron-beam, ion-beam, and x-ray techniques. Most of the characterization techniques and the material or device parameters measured with these techniques are discussed.
NEEM 6461 (IC 701) Electronic Packaging Principles (3 sem. cr.)
Electronic packaging, which is an interdisciplinary technology encompassing the interconnection of
devices and the establishment and control of their operational environment, has become a dominant factor
in the evolution of modern systems. This course provides an introduction to the fundamental principles of
electronic packaging at all levels: chip, board, subsystem, and system. It addresses a broad range of key
thermal, mechanical, material, electrical, and reliability issues; and develops the analytical tools that can
be utilized to determine the basic effects of such problems in given packaging situations.

NEEM 6465 Microelectronics Reliability and Failure Analysis (3 sem. cr.)
This course provides an overview of the microelectronics failure analysis process, introduces basic
concepts for fault and defect diagnosis and localization, and gives a review of specific issues, techniques,
and tools. It also reviews the basics of reliability theory and examines the reliability performance of
devices made with different types of technologies.

NEEM 6491 Introduction to Nanotechnologies (3 sem. cr.)
This course is an overview of the physics and technologies associated with producing nanometer-sized
components. Looks at selected topics from solid-state physics, chemistry, materials science, and
integrated circuit fabrication technologies. Students examine the potential structures and applications of
various types of nanodevices, and discuss public concerns about the danger of nanotechnologies.

NEEM 8401 Advanced Solid-State Physics (3 sem. cr.)
This is an advanced topics course in the physics of solids, with an emphasis on semiconductors, quantum
well and quantum dot structures, superlattices, amorphous solids, and superconductivity.

NEEP

NEEP 2111 (CA 310) Computer Architecture and Organization (3 sem. cr.)
An introduction to the principles of computer architecture, this course introduces modern techniques for
high-speed computing. It includes discussion of pipelining, cache memory, main memory architecture,
and disk arrays, as well as a brief introduction to a hardware design language.

NEEP 2161 (CA 361) Introduction to Microcontrollers (3 sem. cr.)
This course is an introduction to microprocessor instruction sets. It covers assembly language
programming and interfaces to higher-level languages, input/output programming, interrupt handling,
hardware/software design tradeoffs and issues, and design projects.

NEEP 2221 (DS 360) Introduction to Digital Systems (3 sem. cr.)
This course covers Boolean algebra, logic gates, combinational logic, sequential logic, simplification of
logic expressions, and design of logic circuits.

NEEP 6111 (CA 714) Computer Architecture (4 sem. cr.)
This prototype course is offered by a winner of the UCB Distinguished Teaching Award. This course
provides a graduate-level treatment of the architecture of computers. It is intended to provide students
with an in-depth study of computer architecture and design and with the basic knowledge and ability
required to understand and design standard and novel computer architectures. Topics for the course
include fundamentals of computer architecture, instruction set architecture, pipelining, instructional level
parallelism, VLIW, EPIC, vector processors, digital signal processors, memory hierarchy, input/output
and storage, networks and interconnection technology, and multiprocessors.
**NEEP 6164 Embedded Computer Systems (3 sem. cr.)**
This course considers the design of embedded computer systems that are used in a huge variety of industrial and consumer applications. It considers issues from physical sensor interfacing to system integration. Synchronization and timing are examined as are memory requirements, software for embedded applications, common microcontrollers, and analog-digital and digital-analog conversion issues.

**NEEP 6165 (CA 765) Real-Time Computer Systems (3 sem. cr.)**
Real-time computer systems are proliferating. Such systems are used in multimedia applications, real-time databases (e.g., ticket reservation systems), robotics, fly-by-wire aircraft, and spacecraft. This course introduces students to the design and evaluation of real-time systems.

**NEEP 6181 (DS 780) Fault-Tolerant Systems (3 sem. cr.)**
Many computer applications exist where failure of the computer would be very expensive. Examples include real-time embedded computers that control aircraft, spacecraft, robots, and industrial plants, as well as the computers used in stock markets. Such applications require extremely high levels of reliability, which can be provided only by fault-tolerant computers (i.e., machines that can continue to function despite the failure of a certain fraction of their components). This course examines the design of such computers, and students learn how to estimate their reliability.

**NEEP 6221 (DS 510) Digital ASIC Design (3 sem. cr.)**
The course covers modern digital design practices based on Hardware Description Languages Verilog and CAD tools, particularly logic synthesis. It emphasizes design practice and the underlying algorithms. Students are introduced to deep submicron design issues, particularly interconnect and low power, and to modern applications, including multimedia, wireless, telecommunications, and computing. Students must have access to a Verilog simulator and design synthesis tools (e.g. Synopsys Design Compiler and Synopsys Design Analyzer) to take this course.

**NEEP 6271 (DS 770) Testing and Diagnosis of VLSI Systems (3 sem. cr.)**
This course provides an overview of issues related to the testing and reliability of VLSI circuits. A wide range of VLSI testability analysis and design methods is covered to prepare students for the modern industrial and academic environments.

**NEEP 8111 Advanced Computer Architectures (3 sem. cr.)**
This course covers instruction set architecture, processor microarchitecture, multiprocessor architectures, memory and I/O optimization, hardware/software interaction, and design methods.

**NEEP 8221 Advanced Digital Design (3 sem. cr.)**
In this course, students examine the design of complex digital chip sets and systems using hardware description languages and CAD synthesis tools. They consider circuit simulation and design verification, with an emphasis on ultra high-density designs.

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**NMBA**

**NMBA 6120 (NB 720) Organizational Behavior: Working Within the Equations of State (3 sem. cr.)**
Technologists, scientists, and engineers learn that in nature there are rules and formulas that describe the “big picture” or “rules of thumb” articulating the interconnection between various measurable properties
of a system. These formulas are known as Equations of State. This course focuses on another kind of interconnected system—the corporate organization. It delivers the rules and formulas that describe this system, in terms and concepts that can then be utilized to manage organizational behavior, development, and change. The course covers the theory and practice of making organizations more effective by changing individual attitudes and behaviors, group relationships, and organizational cultures. Students gain an understanding of organizations, how they work, and the people in them. Theory and models of organizational behavior, individual interpersonal and group dynamics, influence and motivation, communication, change and change management, and organizational climate are presented.

**NMBA 6130 (NB 721) Leadership and Teamwork: Accomplishing Momentum Transfer Using Power, Influence, and Collaboration (3 sem. cr.)**

With the advent of true globalization, the increasing prevalence of technology, the continued blurring of organizational boundaries, and the rapidly accelerating rate of change, leaders in the 21st century need to consider new frameworks and perspectives to be effective. Both engineers and scientists are familiar with the transfer of momentum from one body to another. Similarly, significant factors in business success revolve around techniques used by leaders to take organizations that are (a) “at rest” and move them into action, and (b) “in motion” and significantly change their direction and outcome. Proper understanding and utilization of power, influence, and collaboration by leaders, whether formally designated or not, can critically alter the success of an organization. This course provides an overview of leadership and teamwork with an emphasis on how leaders and teams manage change in a dynamic technology and business environment. The course is structured into four broad modules: Level-Three Leadership, Creating and Sustaining Collaboration, Leading in the New Workplace, and Leading Change. In each module, students consider various frameworks and perspectives, and apply them to case studies and other examples. By engaging with the class and its virtual learning community, students gain critical expertise in navigating this new leadership landscape.

**NMBA 6140 (NB 740) Strategy and Negotiation: Solving the Boundary Value Problem (3 sem. cr.)**

Functions over a given domain normally behave in a predictable fashion; however, upon approaching a border or an obstacle, prediction of behavior becomes much less certain. Figuring out what will happen at such boundaries often requires solving complicated differential or partial differential equations. Likewise, businesses and their functional groups generally behave in predictable fashion when their environment is stable, but when they are forced to operate beyond their comfortable boundaries, forecasting their outcomes becomes a risky business. Businesses can minimize the risks of unexpected outcomes through the use of successful formulas for strategic thinking, decision-making, and negotiation. This course is designed to provide engineers and technical professionals with an understanding of the theories, concepts, and assumptions of strategy, decision-making, and negotiation. Students are introduced to the fundamentals of strategy at the corporate level to provide a context for strategic thinking at various levels within the enterprise, enabling technical managers to gain insight into how their roles improve an organization’s capabilities for value creation and distribution. They explore the strategic thinking and decision-making that support the execution of corporate strategy. The second part of the course focuses on negotiation theories and implementation strategies, causes of conflict, and conflict-management techniques. These skills are examined in the context of achieving goals and strategy.

**NMBA 6150 (NB 710) Technology and Operations: Moore’s Law and Other Business Accelerators (3 sem. cr.)**

Moore’s Law (transistor density doubling), Parkinson’s Law (memory doubling), and Gate’s Law (software bloat outpacing technology advancement) each describe an aspect of the rapid evolution of technology in the world today. Corporations often look toward technology to gain a competitive advantage or to accelerate their business models. The relationship between technological advancement and business acceleration can be very positive or very negative. Under the right circumstances, technology can provide tremendous momentum to an organization’s operations; however, when the
conditions aren’t right (e.g., placing new technology on top of poor operations), an organization can grind to a halt. Students learn the concepts and develop the skills required to evaluate and manage technology and operations within an organization, to enhance its competitive position. In addition to evaluating the fit of technology, students learn techniques to evaluate healthy operational models. Students explore the complex business processes underlying the development and manufacture of products, as well as the creation and delivery of services. Students also explore the timing of technological implementations, to better ensure that technology’s impact will accelerate positive rather than negative momentum.

**NMBA 6160 (NB 730) Marketing: Maximizing the Organizational I/O Bus (3 sem. cr.)**

All the chips, slots, and cards have to be connected to a data transfer bus for a computer to work properly—data must transfer from hard disk to memory, from memory to CPU, and from CPU to display adapter. To provide value, the computer also has to exchange information with the world outside, and so the I/O bus was designed. Information on customer requirements, as well as competitors’ activities and demographics, must be exchanged with product features, benefits, and promotional activities for an organization to provide value and deliver profits. In addition to information transfer, the I/O bus provides interrupt requests. Such functionality also appears in an organization’s marketing department, allowing the organization to determine when it has met its customers’ needs, redirecting the operation onto other profitable activities. This course focuses on marketing principles and marketing management from the conceptual, analytical, and managerial points of view, with emphasis on technical products or services. Students examine business forces that influence marketing strategy and study strategic marketing decision areas in the technically based firm, including product selection and development, marketing research, market development, distribution, advertising, and promotion.

**NMBA 6170 (NB 750) Finance and Accounting: Measurement and Flow Control for the Economic Engine (3 sem. cr.)**

Businesses are the “engines” of our economy. In their pursuit of profits, they outlay cash, then pull it back, in exchange for goods and services. In this process, businesses attempt to accumulate cash and its equivalents to either (a) build a larger engine or (b) distribute wealth to owners. To be successful at “cash” accumulation, managers need an understanding of where their assets are and control over where they are going. Accounting and finance are the science and engineering for the management of a company’s cash and other assets. The Financial Accounting Standards Board (FASB) has set up nationally recognized standards for the “instrumentation” of a business. With these accurate measurements of a business’s state, financial professionals can then engineer the flow of cash through the business and the economy and accumulate cash/profits/wealth for the owners. This course is designed to give technical professionals an understanding of basic techniques and concepts of financial management and accounting. The focus of this course is on understanding theory and practice in accounting and financial analysis. Studies direct students to comprehend not only financial statements, but also the effects of the decisions behind the statements, on all stakeholders.

**NMBA 6313 (MG 723) Supply Chain Management (3 sem. cr.)**

This course introduces basic concepts of supply chain management, such as logistics, inbound logistics, outbound logistics, inventory, warehousing, materials handling, and transportation. Basics of supply chain modeling for the optimization and monitoring of a supply chain, or a segment thereof, are covered using network (mathematical programming) models. The course draws upon fundamentals that are covered in core courses for management, operations management, engineering management, industrial engineering, and operations research programs (e.g., fundamentals of inventory models, aggregate planning, capacity management).
**NMBA 6336 (MG 726) Global Competitive Environment (3 sem. cr.)**
This course examines the global business environment and its impact on an organization’s business strategy. Special attention will be given to the complexities that arise due to highly diversified markets and business environments.

**NMBA 6351 (MG 770) Legal Environment of Business (3 sem. cr.)**
This course discusses the legal environment within which businesses must operate. Topics include the nature and source of laws, the operation of the judicial system, the operation of administrative agencies, selected Constitutional provisions frequently involved in litigation of business problems, and selected substantive legal areas having a direct relationship with business operation and decision-making.

**NMGT**

**NMGT 6310 (MB 710) Introduction to Engineering Management (3 sem. cr.)**
This course provides an overview of the techniques of applying management principles to professional positions held by engineers and engineering technologists. The management functions of planning, organizing, leading, and controlling are discussed with their role in managing technology.

**NMGT 6380 (MB 780) Engineering Management Capstone Project (3 sem. cr.)**
The capstone project is an individual study of an engineering management problem selected by the student and approved by the course faculty. The goal of this course is to provide students with the opportunity to summarize learning in the Engineering Management program by conducting a significant investigation of an engineering management problem in a working environment. The project includes a detailed written proposal, regular progress reports, and a final written report that presents the results of the investigation.

**NMGT 6760 (TO 760) Introduction to Project Management (3 sem. cr.)**
This course provides an introductory, holistic overview of the broad aspects of project management.

**NMGT 6761 (TO 761) Advanced Project Management (3 sem. cr.)**
This course builds on the introductory course by expanding on the topics already covered and introducing other relevant topic areas.

**NMGT 8510 (QM 710) Operations Research Models (3 sem. cr.)**
This survey course is designed to introduce students to both deterministic and stochastic models used to help managers make more informed decisions. It provides the foundations for more intensive study in such fields as industrial engineering, transportation, computer science, and business. The scope is broad, and because the material is introductory in nature, it is suitable for graduate students with varied technical backgrounds.

**NMGT 8735 (TO 735) Marketing of Advanced Technologies (3 sem. cr.)**
The technology-based company presents a unique set of challenges for the marketing function, particularly the management of high levels of risk and uncertainty about both the technology itself and the markets it does or could address. Almost every aspect of the traditional marketing mix must be considered and adjusted to account for the risk and uncertainty accompanying products, services, and technologies at the earliest stages of the technology life cycle. This course considers each of these stages in the marketing process, bringing to bear insights from a variety of technology management-related fields, and introduces the theories, tools, and specialized techniques used in the marketing of technology. Two themes permeate
the course. The first is that the extreme uncertainties surrounding such marketing issues as segmentation, demand forecasting, product design decisions, pricing, and positioning can be mitigated through a process of understanding the prospective user’s business environment, determining precisely how the product will add value to the business, and developing a value proposition targeted to that customer group. The second theme is that traditional market analysis techniques (e.g., surveys, focus groups) are not sufficiently effective at reducing market uncertainty to an acceptable level when the potential market has yet to be established. This qualitatively different level of uncertainty can be more effectively addressed through proactive involvement of the user at every stage of product conceptualization and development, using prototypes and product “probes,” working with early adopters, and building in extensive user feedback loops.

**NMGT 8750 (TO 750) Total Quality Management and Improvement (3 sem. cr.)**
This course covers the complete field of modern total quality management. It provides the student with a historical overview and with a fundamental understanding of the subject, including statistical thinking, the seven basic tools, quality systems, managing operations for quality, product quality, process quality, customer satisfaction, the role of quality as a competitive tool, critical elements that differentiate high-performing organizations from their competitors, the quality improvement process, and delivering ever-improving value to customers. It also covers Poka-Yoke, policy deployment, daily work management, quality function deployment, Six Sigma, the psychology of quality, and the management of people in a quality environment. The formalism of ISO 9000, the Malcolm Baldridge Award, and the major quality awards is presented.

**NMTH**

**NMTH 1111 (MA 347) Calculus I (3 sem. cr.)**
This course introduces students to the differentiation and integration of single-variable functions, solutions of problems involving maxima and minima, related rates, areas, and volumes.

**NMTH 1112 (MA 349) Calculus II (3 sem. cr.)**
This course covers techniques of integration; transcendental functions; polar, cylindrical, and spherical coordinates; Taylor polynomials; and vectors and curves in space.

**NMTH 2111 Multivariable Calculus (3 sem. cr.)**
This course explores differential and integral calculus of functions of several variables, line, and surface integrals; and theorems of Gauss, Green, and Stokes.

**NMTH 2301 Linear Algebra and Differential Equations (3 sem. cr.)**
This course includes basis, dimension, eigenvalues, and eigenvectors. Also covered are linear differential equations, phase space, forcing/resonance, and Laplace transforms.

**NMTH 3401 (MA 380) Engineering Mathematics Review (3 sem. cr.)**
Topics of this course include matrices, differential equations, Fourier analysis, complex numbers, and Laplace transforms.

**NMTH 3701 (MA 320) Statistical Methods (calculus-based) (3 sem. cr.)**
A course in modern probability, statistics, and statistical inference, this course includes discrete and continuous distributions of random variables, probability models in science, and statistical inference.
NMTH 6201 (MA 584) Ordinary Differential Equations (3 sem. cr.)
This course is a study of the applications, methods of solution, and basic theory of ordinary differential equations (ODE). Topics include classification of differential equations (e.g., order, linearity); solution of linear, exact, separable, and homogenous first-order ODE; and numerical methods for solving ODE. Students also work on the solution of second-order and higher order linear ODE with constant coefficients, series solutions of linear ODE with variable coefficients, Laplace transform methods, solution of systems of linear ODE, and qualitative analysis of nonlinear ODE.

NMTH 6401 (MA 780) Mathematical Methods for Science and Engineering I (3 sem. cr.)
The course discusses topics in complex variables; Fourier series; Laplace transforms; Fourier transforms, distributions, and differential equations; solution methods for solving partial differential equations; and related topics such as special functions, Green’s functions, and variational problems.

NMTH 6501 Decision Theory and Game Theory (3 sem. cr.)
This course introduces decision theory and game theory to engineers and scientists. Decision theory is concerned with how to make rational decisions, especially under conditions of uncertainty or incomplete information. Game theory is concerned with making rational decisions when the decision outcome will be affected by decisions made by other parties. Some of the topics covered include rational choice, expected utility, risk aversion, games of complete information, games of incomplete information, and Bayesian decision theory.

NMTH 6701 (MA 520) Probability and Statistics for Scientists and Engineers (3 sem. cr.)
The use of probability models and statistical methods for analyzing data has become common practice in virtually all scientific disciplines. This course provides a comprehensive introduction to those models and methods most likely to be encountered and used by students in their careers in engineering and the natural sciences.

NMTH 6751 (MA 731) Statistical Design of Experiments (3 sem. cr.)
This course focuses on the design and analysis of experiments. Classes and homework emphasize practical aspects of interpreting data and avoiding pitfalls.

NSEI

NSEI 6711 (SE 787) Management of Information Systems (3 sem. cr.)
This is a course in the management of the development, planning, and utilization of information systems within organizations. The course focuses on the current literature in the management of information systems. Among the topics discussed are the approval and decision process for the development of systems, the use of steering committees, and various approaches to user involvement. The course utilizes a number of Harvard case studies, and students are expected to do a project utilizing the professional literature.

NSEI 6731 (CS 760) Client-Server Computing (3 sem. cr.)
This course gives an overview of middleware and enabling technologies used for the development and support of distributed systems. The course builds on students’ traditional programming skills by demonstrating how distributed applications can be designed and implemented. Projects require the use of middleware technologies, such as RPC, and Java’s RMI.
NSEN

NSEN 2301 Design and Architecture of Large Software Systems (3 sem. cr.)
This course considers the modeling and design of software at the architectural level. Topics include architectural styles and patterns, middleware and application frameworks, configuration management, and design using commercial off-the-shelf (COTS) software.

NSEN 3301 Low-Level Design of Software (3 sem. cr.)
In this course, students look at detailed software design and construction, use of design patterns and refactoring, analysis of designs based on quality criteria, performance and maintainability improvement, and disciplined approaches to design change.

NSEN 3305 (SE 335) Object-Oriented Programming (3 sem. cr.)
This course covers objects and classes, including object-oriented programming languages, analysis of object behavior, class library development and use, and system testing.

NSEN 4501 Technical Writing for Engineers and Scientists (3 sem. cr.)
This course introduces the skills required to present technical information to a variety of audiences. Students examine different types of technical writing such as memos, reports, proposals, and technical and user manuals. They analyze the characteristics of the various technical documents and the expectations of the intended audience for those documents, and are instructed in the skills of technical composition. Students are also introduced to the principles of rhetoric and practice the composition of unambiguous and persuasive pieces of technical writing for designated audiences. Additionally students are instructed in writing in a collaborative environment and in the use of basic principles of page design and typography to communicate information with greater accessibility and clarity.

NSEN 6001 (SE 710) Software Engineering (3 sem. cr.)
This is a graduate-level introductory survey of the concepts and principles that underlie current and emerging methods, tools, and techniques for software development, validation, and maintenance. The class is not project-oriented, but instead concentrates on reading and individual practice of the techniques presented. Topics include life-cycle process models, system requirements capture, prototyping, formal and informal specification, program validation, object-oriented and functional design, testing, and software project management.

NSEN 6011 Formal Methods in Software Engineering (3 sem. cr.)
In this course, students consider the use of logic as an aid to program design. They discuss the formal semantics of programming languages, theorems about programs concerning transformations and state theorems, partial and total correctness, and formal models and model checking.

NSEN 6041 Empirical Software Engineering (3 sem. cr.)
This course looks at what has been learned about software engineering from actual practices in software engineering as contrasted with theoretical principles. It also considers how systematic studies of large software development projects should be carried out and the types of issues that should be targeted for investigation.

NSEN 6061 (SE 720) Software Measurement (3 sem. cr.)
This course includes topics such as measurement theory; development, validation, and use of software measures; software measures in the life cycle, including cost estimation; design measures; software complexity; programmer productivity; test coverage; software reuse; and software reliability.
NSEN 6111 Software Architectures (3 sem. cr.)
This course examines the top-level design or architecture of software systems. Students learn about various architectural styles and the types of applications for which they are most suited. They also consider different formalisms or architectural description languages for specifying software architectures and study frameworks and patterns. Also examined is the role of architecture in the overall software development life cycle.

NSEN 6121 Software Design (3 sem. cr.)
This course looks at the design of software at a detailed level. It considers the elements of design, such as components, connectors, and topology, and also principles of design, such as modularity, coupling, cohesion, abstraction, and information hiding. The creation of a design is presented both from first principles and from the use of design patterns. The course also presents some principles for assessing the qualities of a design.

NSEN 6251 (SE 770) Software Specification (3 sem. cr.)
This is a graduate-level survey of concepts, principles, and techniques related to software and systems specification. Topics include system modeling, requirements elicitation, analysis and documentation techniques, validation and prototyping, and formal methods. Students practice the techniques presented in class via individual and/or group exercises and a term project.

NSEN 6301 (SE 730) Object-Oriented Analysis and Design (3 sem. cr.)
This course is a study of object-oriented analysis and design. Students compare the different object-oriented software engineering methodologies and explore the object-model-to-database mapping process.

NSEN 6331 (SE 746) Embedded Systems Software Development (3 sem. cr.)
Embedded systems are involved in almost every facet of modern life, including cell phones, pagers, answering machines, microwave ovens, televisions, VCRs, CD and DVD players, video game consoles, remote controls, fax machines, and digital cameras. Modern automobiles may contain as many as 65 embedded microprocessors, controlling such tasks as antilock braking, climate control, engine control, audio system control, and airbag deployment. Embedded processor sales far outweigh any other type of microprocessor. This tremendous growth in embedded computing has given rise to demand for engineers with experience in designing and implementing embedded systems. This course is aimed at practicing embedded software engineers as well as those engineers planning to enter the embedded field. The course presents practical lessons and techniques for use in designing, implementing, integrating, and testing software for modern embedded systems. It describes what an embedded system is, what makes these systems different, and what embedded systems designers need to know to develop embedded systems. The course provides students with a life-cycle view for designing multi-objective, multi-discipline embedded systems.

NSEN 6333 (ST 720) Real-Time Systems Software Development (3 sem. cr.)
Real-time computer systems are proliferating. Such systems are used in multimedia applications, real-time databases (e.g., ticket reservation systems), robotics, fly-by-wire aircraft, and spacecraft. This course introduces students to the design and evaluation of real-time systems.

NSEN 6341 Secure Software Development (3 sem. cr.)
This course investigates issues associated with developing software systems that are resistant to tampering and sabotage. Software design practices that promote security are studied; also examined are requirements/specifications and development procedures that emphasize the incorporation of security considerations from the very beginning of software development.
NSEN 6411 (SE 750) Software Unit and Integration Testing (3 sem. cr.)
This is a graduate-level survey of concepts, principles, and techniques related to software testing and verification. Topics include inspections and reviews, black-box and white-box testing strategies, axiomatic verification techniques, predicate transforms, and function-based verification. Students practice the techniques presented in class via individual and/or group exercises.

NSEN 6414 (SE 754) Object-Oriented Testing (3 sem. cr.)
The focus of this course is on object-oriented and component-based software testing techniques, but many of the techniques discussed in this course can be used regardless of the development paradigm. The course describes what to test in object-oriented development efforts and techniques for how to test object-oriented software. It discusses real-world issues that arise in planning and implementing effective testing for object-oriented and component-based software development. The course explores how testing object-oriented software differs from testing procedural software and highlights the challenges and opportunities inherent in object-oriented software testing. The course also covers integration testing in each stage of development and describes what to test at each stage. This process, as well as specific testing techniques, are supported by comprehensive examples.

NSEN 6421 (SE 759) Software System-Level Testing (3 sem. cr.)
In this second graduate course on topics related to software testing and verification, topics include design-of-experiment approaches to test construction, statistical analysis of test results, proof of correctness, fault injection, and automated software testing. Students acquaint themselves with current papers in testing literature and practice the techniques presented in class via individual and/or group exercises.

NSEN 6451 (SE 752) Software Reliability and Safety (3 sem. cr.)
In this course, students obtain advanced knowledge and learn to apply that knowledge in the following areas: software reliability engineering and software safety engineering. Students can also conduct advanced research in these areas.

NSEN 6461 (SE 767) Software Performance Engineering (3 sem. cr.)
Software performance is an important area of concern for practitioners. When software products are initially constructed, they often fail to meet their performance objectives. Fixing these problems is costly and causes schedule delays, cost overruns, lost productivity, damaged customer relations, missed market windows, lost revenues, and a host of other difficulties. In extreme cases, it may not be possible to fix performance problems without extensive redesign and re-implementation. In those cases, the project either becomes an infinite drain of time and money or is, mercifully, cancelled. These problems can be prevented by the systematic application of a few simple performance analysis and prediction techniques. This course details a set of techniques and strategies that can be used by software developers, project managers, and performance specialists to manage the performance of software throughout the development process. The course focuses on how to design performance into software systems early and then maintain performance throughout the software development cycle. The course details various software performance engineering (SPE) models that can be used for a variety of applications, including Web-based, real-time embedded, and distributed systems. Specific topics include the use of UML for SPE, modeling complex interactions in distributed systems, and planning and conducting performance measurements.

NSEN 6471 (SE 760) Software Quality Management (3 sem. cr.)
In this course, students explore the plans and actions necessary to provide confidence that a software product conforms to established technical requirements. Topics include strategies for quality engineering, product review, development of test plans and procedures, testing, audits, and configuration management. Also covered are the concept of software quality, software metrics, Total Quality Management, and implementation of a software quality assurance process.
**NSEN 6511 (SE 785) Software Project Management (3 sem. cr.)**
This course covers techniques for planning, organizing, scheduling, and controlling complex software system development and support projects.

**NSEN 6571 (SE 792) Software Acquisition Practices (3 sem. cr.)**
Issues relating to software procurement, contract law, specification and control of product processes are examined. Topics include factors that affect cost, cost estimation, cost/benefit analysis, and risk analysis, as well as legal implications with respect to ownership and use. Techniques and models of cost estimation are studied in detail. An actual government request for proposal is used as a case study.

**NSEN 6811 Internet Software Technologies I (3 sem. cr.)**
This course discusses topics such as Internet architectures and protocols, network programming, client-server architecture and protocols, client-side programming, distributed object computing, and Web applications.

**NSEN 6812 Internet Software Technologies II (3 sem. cr.)**
Students explore concurrent programming, collaborative computing, server-side programming, use of distributed databases, messaging architecture, distributed computing with loosely or tightly coupled software system architectures, and XML technology.

**NSEN 6851 Computer Game Design I (3 sem. cr.)**
This course provides an introduction to game design and implementation. Topics include the history of computer games, the game development process, principles of game design and game play, technical foundations such as artificial intelligence, graphics, networking, and software engineering.

**NSEN 6852 Computer Game Design II (3 sem. cr.)**
This second course in computer game design considers further issues in game design, such as game genres and genre-specific design issues; plot, story, and level design; human-computer interaction and user interfaces; simulation engines for physical and biological dynamics; social interactions; testing; and ethical issues in game creation and the gaming industry.

**NSEN 8001 Software Evolution (3 sem. cr.)**
This course is concerned with how software grows, changes, diverges, and disintegrates over time. Topics include software architecture and product-line architectures, design patterns, software re-use, modularity and information hiding, reverse engineering and design recovery, configuration management and versioning, and maintainability versus evolvability.

**NSEN 8341 Software Immunization (3 sem. cr.)**
This course is about the design of software systems that resist unauthorized modifications or sabotage by utilizing techniques similar to those used by biological organisms to resist and repel disease-causing agents. Topics include pattern recognition, intrusion detection and monitoring, genetic algorithms, immune system functioning, and evolvable software.
**NSPM 6117 (ME 517) Mechanical Vibrations (3 sem. cr.)**
This is a graduate-level introduction to the theory of mechanical vibrations, with application to simple machine and structural members. The general rules of vibration behavior are developed through theoretical models and laboratory exercises.

**NSPP**

**NSPP 6325 (PD 525) Integrated Design and Manufacturing (3 sem. cr.)**
This course introduces students to a process approach to engineering design, manufacturing, and service applications. Models, modeling tools, solution approaches, and methodologies for analysis and improvement of processes, including the product development and manufacturing processes, are discussed. The science of process modeling and analysis is illustrated with case studies.

**NSPP 6410 (SP 510) Modeling Manufacturing Systems (3 sem. cr.)**
This course examines general problems in the design, planning, and control of manufacturing systems. Emphasis is placed on system analysis using a variety of modeling techniques such as simple probability, linear programming, queuing theory, Markov chains, and discrete event simulation, with the objective of improving system performance. The course is self-contained so that no previous knowledge of these types of models is required. Although the course is targeted toward manufacturing industries, much of the material is directly applicable to a variety of service industries.

**NSYS**

**NSYS 6120 (SY 720) Systems Engineering and Analysis (3 sem. cr.)**
This course introduces students to an organized multidisciplinary approach to designing and developing systems. They explore concepts, principles, and practices of systems engineering as applied to large integrated systems. Topics include life-cycle costing, scheduling, risk management, functional analysis, conceptual and detail design, testing and evaluation, and production.

**NSYS 6123 (SY 723) Systems Architecting (3 sem. cr.)**
This course introduces students to the concept of systems architecting—an approach that goes beyond mathematical analysis and optimization of systems. The process of creating architectures dates back to ancient Egypt: the complexity of the pyramids still astounds designers and builders. Complexity creeps into many systems; in fact, the number of interrelationships among elements can far outnumber the number of elements themselves. It is essential for engineers to understand what is meant by system complexity. Qualitatively different problem-solving techniques are required when complexity is high. Analytical processes and tools are often not sufficient at higher levels of complexity: experience-based heuristics, abstraction, and integrated modeling become essential. It is also critical that engineers gain insight into how systems may be simplified and how to focus on the essentials only. A systems approach focuses on the system as a whole when deciding what is required and what is feasible. The focus of the course is the process whereby engineers can determine and concentrate on the few critical details and interfaces.
NSYS 6131 (SY 562) Systems Integration and Test (3 sem. cr.)
This course highlights decisions to be made in choosing engineering processes. Students learn to better understand the strategies to use for designing, integrating, testing, and validating products and systems. Topics include an overview of systems engineering activities, synthesis of solutions, integration of knowledge and requirements, verification and validation of the system, and managing these engineering areas.

NSYS 6140 (SY 540) Systems Optimization and Analysis (3 sem. cr.)
This course emphasizes the systems analysis process as the rational basis for developing optimum products consistent with customer requirements. Specific topics include requirements analysis, effectiveness analysis, operational analysis, environmental analysis, and life-cycle analysis. Modeling and optimization techniques are introduced. A special emphasis is placed on Design for X considerations, including design for reliability, maintainability, usability, supportability, producibility, disposability, and life-cycle costs in the context of the systems engineering process.

NSYS 6151 (SY 750) Systems Reliability Engineering (3 sem. cr.)
Students learn about the classical techniques and concepts needed for evaluating the long-term and short-term reliability of engineering systems. This course provides an in-depth coverage of tasks, processes, methods, and techniques for achieving and maintaining the required level of system reliability considering operational performance, customer satisfaction, and affordability. Specific topics include establishing system reliability requirements, reliability program planning, system reliability modeling and analysis, system reliability design guidelines and analysis, system reliability test and evaluation, and the maintenance of inherent system reliability during production and operation.

NSYS 6160 (SY 560) Systems Engineering Management (3 sem. cr.)
This course provides the necessary techniques for planning and controlling systems, including evaluating the schedule and operational effectiveness of systems management strategies. Performance measurement, work breakdown structures, cost estimating, and quality management are discussed. Also covered are configuration management, standards, and case studies of systems from different applications areas.

NSYS 6163 (SY 563) Integrated Risk Management (3 sem. cr.)
This course is an introduction to risk management, based upon integrated trade studies of program performance, cost, and schedule requirements. Topics include risk planning, risk identification and assessment, risk handling and abatement, risk impact analysis, and risk management.

NSYS 6171 (SY 570) Logistics Systems Engineering (3 sem. cr.)
Students learn concepts, methods, and techniques used in the design and engineering of logistics systems associated with product production/manufacturing and customer usage. This course focuses on using system engineering practices, analyses, and bases. Specific topics include logistics systems requirements, logistics systems design and engineering concurrent with product development, transportation and distribution, warehousing, supply/material support, inventory analysis, fundamentals of supply chain design and management, and product/customer support.

NSYS 6180 (SY 580) Systems Engineering Design (3 sem. cr.)
Students are introduced to system design of hardware and software systems. Specific topics include design concept, design characterization, design elements, reviews, verification and validation, threads and incremental design, unknowns, performance, management of design, design metrics, and teams. The class centers on the development of real-world examples.
NURS

NURS 6000 Success Strategies in the Master of Science Program in Nursing Online Environment (1 sem. cr.)
This course is an introduction to the technology used in the M.S. program in Nursing, the online learning platform, student services, required university forms, the Professional Development Plan, Program of Study, and transfer of credit procedure (if applicable). Orientation to the mission, philosophy, and expected student outcomes on the university, school, and program levels is included. The roles and responsibilities of master’s-prepared nurses are explored. The process for the professional portfolio is described and implemented.

NURS 6005 Nursing Roles for Today and Tomorrow (4 sem. cr.)
In this course, the characteristics of professionalism are presented. The need to value the profession and its future is stressed. Selected concepts and roles that highlight the continued evolution of the profession and practice are examined. Nontraditional roles are explored as well as opportunities for developing and supporting new roles. Processes for creating innovative roles in traditional settings are also highlighted. A group project is included.

NURS 6010 Advancing Nursing Through Inquiry and Research (4 sem. cr.)
The focus of this course is on the steps of the research process. Qualitative and quantitative methods are explored. Inquiry and critical analysis of scholarly literature provide the foundation for evidence-based practice. Strategies for utilizing research are examined. A group project is included.

NURS 6015 Information and Health Care Technologies Applied to Nursing Practice (4 sem. cr.)
The focus of this course is directed toward the understanding and use of information technologies and systems that support decision-making in nursing practice, administration, research, and education. Tools such as a listservs, the World Wide Web, email, and databases are used as examples of information sources. Advances in technology that support the delivery of services—as well as the collection, storage, and retrieval of information—are considered. Ethical and legal issues that impact the use of technology in health care are presented. A group project is included.

NURS 6020 Healing Therapies in Nursing Practice (4 sem. cr.)
This course focuses on transformation in health care brought about by changing demographics and multiculturalism. The inclusion of early healing traditions into Western medicine is explored. Evidence for the value of healing therapies is examined. The role of nurses in evaluating therapies, developing strategies for including nontraditional therapies in practice, and educating consumers is presented. A group project is included.

NURS 6025 Managing a Continuum of Care for Positive Patient Outcomes (4 sem. cr.)
This course is based on a multifaceted definition of patient outcomes management. Concepts related to the management of disease and the prevention of further disability are explored. The impact of cultural, social, political, legal, and environmental factors on providing a continuum of care is identified. The role of nurses in understanding the health continuum and achieving positive outcomes for individuals, groups, and communities is presented. The topics are presented from a research, evidence-based perspective and address documentation, evaluation, and quality outcome standards. A group project is included.

NURS 6030 The Practice of Population-Based Care (4 sem. cr.)
This course is based on an interdisciplinary approach to caring for populations. Major components include concepts of health, levels of prevention, epidemiology of wellness, global health issues, and
control of health problems. Principles of interdisciplinary care are addressed. Planning, intervention, and evaluation of care in communities are stressed. Integrative approaches to working with groups in the community, in order to positively impact health behaviors, are examined. A group project is included.

**NURS 6100 Understanding Health Care Systems (3 sem. cr.)**
This course provides a critical analysis of economic, sociological, and political factors that affect the nursing and health care delivery systems. U.S. health policies that impact access, quality, costs, delivery systems, professional practices, and reform are discussed. Current issues and concerns related to health care financing and payment systems are explored. Course assignments focus on nursing practice applications.

**NURS 6110 The Nurse Leader: New Perspectives on the Profession (3 sem. cr.)**
This course presents the impact that changes in health care systems have had on transforming the nursing profession. Theories related to leadership and management are included. Strategies for becoming empowered are presented to assist master’s-prepared nurses to assume and sustain leadership roles. Course assignments focus on nursing practice applications.

**NURS 6120 Linking Theory to Nursing Practice (3 sem. cr.)**
This course includes a comparative study and critical analysis of major conceptual models and theories in nursing. Theories and models are evaluated for their usefulness in guiding practice decisions. The relationship between theory and practice is demonstrated. Course assignments focus on nursing practice applications.

**NURS 6130 Evidence-Based Practice Through Research (3 sem. cr.)**
This course emphasizes the competencies necessary to read critically, then evaluate and interpret findings of nursing research studies. Utilizing research to make practice decisions based on the evidence and incorporating research findings into professional nursing practice are emphasized. Utilization of technology in the research process is explored. Course assignments focus on nursing practice applications.

**NURS 6140 Ethical and Legal Views of the Changing Health Care System (3 sem. cr.)**
This course reviews ethical principles and theories and relates them to the new challenges facing the health care delivery system. Legal factors are examined in relation to their impact on ethical decisions. Ethical dilemmas are viewed in the context of ethical decision-making frameworks. The changes in health care are examined for their influence on nurse leaders as ethical practitioners. Course assignments focus on nursing practice applications.

**NURS 6150 Promoting and Preserving Health in a Diverse Society (3 sem. cr.)**
This course is based on a multifaceted definition of community. The promotion of healthy societies, worldwide, through health improvement and disease management/prevention activities is explored. The effects of social, political, and environmental conditions are examined in relation to health care access, quality of care, and cultural relevance. The contributions of nurse leaders to improving health in society are presented. Course assignments focus on nursing practice applications.

**NURS 6200 The Nurse Administrator: Leading and Managing for Excellence (4 sem. cr.)**
This course focuses on the theory and practice of administration. Standards of practice for nursing administration serve as a foundation for discussion. Major topics include roles and responsibilities, quality improvements, strategic planning and management, regulations, and information systems. The goal of nurse leaders to achieve excellence in the delivery of patient services is emphasized. A field experience is included to allow for application to practice settings. Course assignments focus on nursing practice applications.
NURS 6210 Health Care Finance and Budgeting (4 sem. cr.)
This course applies financial principles to developing, budgeting, and managing resources. Budgeting processes used in health care settings and the nurse administrator’s responsibilities are covered. The impact of private and public policies and budgeting models and information systems is included. Budget and resource decisions that contribute to the achievement of organizational and nursing service outcomes are examined. A field experience is included to allow for application to practice settings. Course assignments focus on nursing practice applications.

NURS 6220 Human Resource Management (4 sem. cr.)
This course addresses the roles and responsibilities of nurse administrators in human resource management. Current legal, ethical, professional, and practice policies and standards are explored. The applications of technology to human resource functions are presented. Strategies that support positive organizational and nursing service goals are examined. A field experience is included to allow for application to practice settings. Course assignments focus on nursing practice applications.

NURS 6230 Case Study: Quality Nursing in a Complex Health Care Organization (4 sem. cr.)
This course uses a case study approach to examine a nursing practice issue. Based on the information in the case study, students apply previous knowledge to the issue. The goal is to use a variety of administrative strategies to achieve positive patient care delivery outcomes. Students develop a comprehensive plan in the context of current nursing service challenges. A field experience is included to allow for application to practice settings. Course assignments focus on nursing practice applications.

NURS 6300 Student-Centered Learning in Nursing Education (3 sem. cr.)
This course focuses on theories and principles that identify the diverse learning needs of adults. Strategies to meet these needs, within the framework of student-centeredness, are presented. Major topics include socialization, motivation, critical thinking, learning styles, and the impact of societal values on the learning environment. The unique needs of nontraditional, international, educationally disadvantaged, and physically challenged students are addressed. The goal of nurse educators is to recognize students’ individual and collective needs to create a supportive learning environment. Course assignments focus on nursing practice applications.

NURS 6310 Teaching Strategies for Nurse Educators (3 sem. cr.)
This course focuses on theories and principles that support a variety of evidence-based teaching strategies. Personal and professional teacher attributes that demonstrate positive role-modeling are presented. Major topics include a tool box of instructional strategies, effective communication, reflective thinking, student interactions, and student engagement. The goal of nurse educators is to develop a learning environment that supports student success. Course assignments focus on nursing practice applications.

NURS 6320 Integrating Technology Into Nursing Education (3 sem. cr.)
This course focuses on informational technologies and their application in a teaching/learning environment. The uses of media, multimedia, computer-based technologies, models, and simulations are explored. Processes for evaluating and selecting technology are presented. Technologies that support course processes—such as tracking student assignments and participation, outcomes assessment, and grading—are included. Distance and online education modalities are examined. Student and faculty use of online information resources, presentation systems, and information storage systems, and the integration of technology included with texts and printed materials are explored. The goal of nurse educators is to use current and evolving technology to enhance student learning. Course assignments focus on nursing practice applications.
NURS 6330 Curriculum Development, Assessment, and Evaluation (3 sem. cr.)
The educational environment is impacted by social, economic, regulatory, and technological transformations. Nursing education curricula must be relevant and meet the health and nursing needs of society. This course focuses on curriculum development and the many processes that contribute to it. The philosophical foundations of curriculum development are addressed. Major topics include curriculum components; societal, professional, and educational trends, frameworks, competencies, and outcomes; organizational constraints; and selection of learning activities. The processes of curriculum assessment and evaluation are defined and presented in the context of program, course, and student outcomes. The goal of nurse educators is to develop curricula that address the nursing needs of society, are supported by standards of practice, and prepare graduates for practice in diverse settings. Course assignments focus on nursing practice applications.

NURS 6340 The Nurse Educator: Roles, Responsibilities, and Relationships (4 sem. cr.)
This course focuses on the roles, responsibilities, and relationships that are part of being a nurse educator. While those nurses in academic settings are the most widely recognized as educators, nurses are also educators in other health care settings. The significance of the educator role is explored as it applies to diverse settings. Concepts related to being change agents and leaders, role socialization, legal and ethical expectations, and development are examined. Major topics include professional development, balancing role demands, using evidence to improve teaching, scholarship related to teaching, development of partnerships, collaboration, and advocacy. The goal of nurses, in all settings, is to be effective educators who guide and facilitate learning and contribute to the educational goals of the organizations in which they work. The knowledge gained in the previous courses provides the foundation for implementing this role in an educational setting. A field experience is included to allow for application to practice settings. Course assignments focus on nursing practice applications.

NURS 6500 Synthesis Project (3 sem. cr.)
This course enables students to develop a project based on the principles, standards, and methods learned in their coursework. Students select a real-world problem that is important to their specialization. Then they work with faculty to develop a project, and select a site and mentor, based on project guidelines. The proposal for the project is approved. The professional portfolio, developed throughout the program, is finalized. A field experience is included to allow for the initial practicum preparation.

NURS 6510 Synthesis Practicum (3 sem. cr.)
This course enables students to apply the principles and methods learned from their coursework. By selecting a real-world problem and working with mentors, students apply standards of practice to develop, implement, and evaluate a plan. The final project is presented in the workplace. At the completion of the project, students submit a scholarly paper. The practicum includes a minimum of 125 hours.

PPPA

PPPA 8000 Foundations for Graduate Study (4 cr.)
This course is designed to provide students with an understanding of the expectations for becoming a successful online learner, and to familiarize them with Walden’s mission, the School of Management, and the Public Policy and Administration (P.P.A.) doctoral program. Students also learn to use the online learning environment and other Internet tools, such as email and Web browsers, and techniques of online communication and interaction with faculty, administration, and students. Students practice APA formatting, writing skills, critical-thinking skills, case study methods, time and stress management, and group activities in doctoral work. In addition, students learn about student services, including registering
online, ordering textbooks, and preparing their Professional Development Plan (PDP) and Program of Study (POS). Students are also introduced to the KAM process. *(This course must be taken in the first quarter at Walden and must be successfully completed before a student can take further courses in the P.P.A. program.)*

**PPPA 8002 KAM Writing Course (2 cr.)**
This course covers the structure of the KAM, and research and writing techniques needed for the successful development of a KAM. In this course, students develop a draft Learning Agreement for their first KAM, under a faculty member’s guidance. *(This course must be taken immediately before a P.P.A. student plans to begin the KAM studies portion of the program and must be successfully completed before beginning KAM studies.)*

**PPPA 8105 Managing at the Boundaries: Creative Thinking for Social Change (4 cr.)**
This course examines the historical and contemporary patterns of interaction between levels of government and between the public, private, and nonprofit sectors in the United States. Of all the Western democracies, the United States has the most fully developed nonprofit sector. In the past 20 years, the private sector has become more and more important to the other two sectors with, for example, growing efforts to privatize public service delivery and to use corporate strategies and connections for enhanced revenue in the nonprofit sector. Increasingly, the boundaries between governmental levels and the three sectors have become more blurred and the action at these intersections more critical for the effectiveness of public/nonprofit sector leaders and managers.

**PPPA 8200 Intellectual Traditions of Public Policy and Public Administration (4 cr.)**
This course focuses on the historical and contemporary roles and relationships of the public and nonprofit sectors in the United States. It provides a scholarly perspective on public policy and administration that traces major theories associated with the field and the political, social, and economic context within which they developed. Students are expected to gain a clear understanding of the “layers of government” and their interdependence between local municipalities, county, state, and federal levels. This is intended to make a strong connection between the student’s own professional development and development of the major theories and concepts of public administration.

**PPPA 8305 Professional Leadership and Ethics (4 cr.)**
This course examines the ethical issues of public and nonprofit sectors. It provides conceptual tools to clarify moral dilemmas and analyzes individual decision-making strategies and organizational programs from an ethical perspective.

**PPPA 8320 Public Policy Implications of Terrorism Legislation and Policies (4 cr.)**
This course provides a broad perspective on the history of the U.S.A. Patriot Act, similar terroristic legislation and immigration laws, and their policy implications on law enforcement, governmental entities, organizations, and individuals. It provides a basic foundation upon which to build for those public administrators and public policy analysts who are charged with drafting and implementing public policy and enforcing and/or responding to potential terroristic threats, while simultaneously upholding and protecting constitutional freedoms. Material for this course is drawn from contemporary texts, Web sites, case studies, and material representing international, national, and local governments and organizations. Learners critically review and analyze the U.S.A. Patriot Act and similar terroristic legislation and policies, and participate in online discussions about these laws and their implications on U.S. Constitutional freedoms.

**PPPA 8321 Terrorism: A Systemic Approach for Emergency Preparedness (4 cr.)**
This course provides participants with an overview of terrorism—local, national, and international—and the need to develop a systemic approach for emergency preparedness. Topics include, but are not limited
to, terrorism overview, terrorism and public health, bioterrorism, biosecurity, cyberterrorism, risk assessment, implications for public health, and components of a systemic preparedness infrastructure. Course participants begin the development and/or analysis of a terrorism preparedness infrastructure, and participate in online discussions.

**PPPA 8322 Critical Incident Planning and Leadership (4 cr.)**
This course examines the principles of emergency planning, selection of leaders, specialized planning (e.g., schools, tourism), mutual aid, and leadership theories. It provides a basic foundation for public administrators to develop a critical incident plan and also understand leadership theories. Course participants critically analyze case studies, identifying weaknesses and potential solutions.

**PPPA 8330 Holding Up the Mirror: Understanding Different Cultures and Increasing Global Consciousness (4 cr.)**
This course offers students an opportunity to explore and understand the cultural values and styles of communication, reasoning, and leadership unique to their home culture. Students apply their increased understanding to other cultures. They also identify and become familiar with the challenges American nonprofits face as they work internationally or cross-culturally within the United States. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**PPPA 8331 Crossing Borders: U.S. and International NGO Organizational Cultures and Environments (4 cr.)**
In this course, students study in depth the cultures, structures, and activities of NGOs in select countries and compare their activities, organizational cultures, structures, and working environments with nonprofits in the United States. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**PPPA 8332 Placing NGOs in the Global Context (4 cr.)**
This course offers students knowledge and understanding about the geopolitical and economic contexts in which international, nongovernmental, and voluntary agencies function in other countries. Students analyze the historical, political, social, and cultural contexts in which NGOs work and the implications these contexts have on the work of local and international NGOs. Students identify strategies that make the international and cross-cultural efforts of NGOs successful. *(Prerequisite: A course or direct experience in nonprofit management is strongly advised.)*

**PPPA 8340 Leadership for the Nonprofit Sector (4 cr.)**
This course provides an overview and history of the third sector in American society, featuring governance and nonprofit corporation law. Government and business are the first two sides of the sector triangle. The course covers the relationships between the board and the executive director. Ethics topics typical to nonprofit organizations, such as conflict of interest, fiduciary responsibility, human resources, and board organizational structures, are examined in depth. The role of nonprofit organizations in fostering social change is a major component of this course, and the emerging trend toward entrepreneurship in nonprofits is examined in detail.

**PPPA 8341 Fund Raising and Marketing in Nonprofit Organizations (4 cr.)**
This course examines the history of philanthropy and the philosophy of giving, and their relationship to the nonprofit sector in the United States. The principles of development and their relationship to organizational mission, governance, and capacity are a core part of the course. The course provides students with an understanding of the many fund-raising techniques and funding sources that generate financial support for nonprofits, as well as the contexts of their use.
PPPA 8342 Nonprofit Management (4 cr.)
This course provides the basis for understanding nonprofit management issues and for understanding how management in the nonprofit sector differs from both public and business administration. It includes special issues of nonprofit management, such as mission, budgeting, financial management, strategic planning, and outcome evaluation and assessment.

PPPA 8350 Historical and Contemporary Issues in Criminal Justice (4 cr.)
This course looks at the evolution of crime—from lone criminals to worldwide syndicates—using the scientific rigor built into the selected readings and discussions. Among the topics examined are the philosophy of community- and problem-oriented policing, transnational crime, terrorism, and the new nexus between them. The course equips current and future leaders with the knowledge and depth of understanding to assess and manage the opportunities, innovations, and challenges in their profession.

PPPA 8351 Policy Analysis in the Criminal Justice System (4 cr.)
This course reviews key court decisions and explores the tension between constitutionally guaranteed individual rights and crime-prevention and public-safety efforts. The course also covers policy analysis and planning in the criminal justice field, and offers an understanding of the policy context in which the criminal justice system functions.

PPPA 8352 Leadership: Putting Theory into Practice in Criminal Justice Administration (4 cr.)
This course introduces students to the problems that currently confront the administration of the criminal justice system, as well as problems predicted for the future. So that students are prepared to lead efforts to address these challenges, this course offers powerful models for strategic, critical, and reflective thinking. This course also immerses students in discussion about the major components of effective justice administration: organizational thought and theory, leadership, human capital, policy development and implementation, and collaboration with other public safety and community organizations.

PPPA 8360 Public Safety Issues (4 cr.)
This is a comprehensive survey of the issues faced by public safety agencies and personnel at the local, state, and national level, including police and sheriff, emergency medical, and fire services and related organizations. It emphasizes communication and coordination between public safety organizations.

PPPA 8361 Managing Public Safety Organizations (4 cr.)
This course examines how public safety leaders find solutions to major issues confronting their operating systems, both organizations and communities, through research, analysis, planning, and decision-making. It adapts classic business management techniques and leadership principles to public safety operations. The concepts of “first-planner” and “first-responder” are introduced. Solutions and alternatives to varied situations confronting public safety managers are developed. Emphasis is on systems approaches, environmental analyses, contingency planning, implications for change, coordination, and controls.

PPPA 8362 Ethics in Preserving Public Safety (4 cr.)
This course applies the lessons of the first two courses in the specialization—management issues and planning solutions—to specific cases of leadership and personal responsibility in the public safety field. Using primarily the case study method, students will analyze leadership and ethical issues public safety officials encounter in their work and develop effective approaches for how standards and ethics can best be instilled throughout a public safety organization. Students analyze classic cases, including the federal 9/11 Commission report, for lessons applicable to any public safety agency and situation—in intelligence, planning, operations, command, interagency coordination, communication, and technology.

PPPA 8380 Policy and Politics in American Political Institutions (4 cr.)
This course introduces students to the crafts of policy-making and analysis in the American democratic
system. It covers the policy process—agenda setting, using policy analysis tools, managing the political process, implementing policy, and providing evaluation and feedback. Students develop skills in policy and economic analysis, as well as skills in determining the political feasibility of proposed policies. Regulation as a policy choice is discussed. Students completing this course will enhance their abilities to develop alternatives and to assess strategies that are proposed to achieve certain policy objectives. Policy areas of interest to students form the foundation of this course and may include communications, immigration, social, transportation, housing, labor, arts, and environmental policies.

**PPPA 8381 Program Evaluation (4 cr.)**
This course provides an introduction to the tools used by policy-makers and policy analysts to evaluate the impact of social programs. Topics include selecting programs to evaluate, crafting program descriptions, identifying stakeholders and their interests, developing logic models, framing evaluation questions, applying utilization-focused evaluation techniques, using quantitative and qualitative tools to complete formative and summative evaluations, and formulating evaluation reports, and providing feedback to decision-makers. By the end of the course, each student develops a program evaluation design for a social program.

**PPPA 8382 Public Policy and Finance (4 cr.)**
This course covers both micro- and macroeconomic models used in policy formulation and how public finance influences policy choices as well as implementation alternatives. Students examine tax policies and tax incentive models, budgeting, public/private models, market influences on policy, the impact of government expenditures on income redistribution, and economic considerations of welfare, food stamps, workers’ compensation, and Social Security. Outsourcing of public programs is also examined.

**PPPA 8390 Strategic Context of Public Management and Leadership (4 cr.)**
This course engages learners in collaborative study of the changing strategic context of public administration. Learners apply a systems perspective to construct a public enterprise model of the public organization of their choice, as a way of understanding the strategic context for practical action and the stakeholder relations involved. This is an organization “mental model” similar to a traditional “business model,” but includes the three interrelated flows of money-knowledge-influence. Emphasis in this course is on management and leading of the unknown—imagining and creating a future that works in a time of unprecedented and unpredictable change. Students apply strategic scenarios to organizational change for the public organization of special interest to them. Students also develop professional action habits for pragmatic action learning in the practice of public administration.

**PPPA 8391 Transformative Change in a Shared-Power World (4 cr.)**
This course engages students in collaborative study of the nature and methods of transformative change in the complex human systems of contemporary public organizations. Students learn a pragmatic action learning process for learning from the experience of transformative change in complex systems. The dynamics of complex adaptive systems are studied to gain an understanding of how large-scale and highly interrelated human systems change through self-organization. Appreciative inquiry and other selected methods of transformative change are studied and applied to a positive organizational change situation of special interest to the students. Students also develop professional action habits for pragmatic action learning in the practice of public administration.

**PPPA 8392 The Language of Leadership (4 cr.)**
In today’s complex environment, leaders engaged in shaping public policy must know how to use the emotional as well as the intellectual power of language to motivate, inspire, and competently manage their organizations. Dynamic leadership requires understanding and use of techniques that affect both conscious and unconscious influences on human behavior. Effective communication connects at many different levels. This course provides students both theoretical and practical information demonstrating...
the necessary components for making such connections and show them why stories, symbols, and metaphors are an essential element in the language of leadership.

**PPPA 8400 Nonprofit and Governmental Budgeting and Finance (4 cr.)**
This course examines governmental and nonprofit budgeting policies and practices, as well as the fiscal climate within which these organizations have to operate. Students gain a better understanding of the role of finance in public and nonprofit organizations and the theories underlying major fiscal policy debates. They also learn how to construct budgets and capital improvement plans, as well as how to successfully generate funds to support nonprofit sector organizations.

**PPPA 8427 Research Seminar II: Research Methods (5 cr.)**
Topics include problem definition; development of research questions; theory and hypothesis testing; variable definition and measurement; correlational, survey, observational, and nonexperimental designs; experimental design; language, logic, and execution of qualitative designs; and integrated qualitative and quantitative designs. Students write the dissertation prospectus and develop skeleton drafts of their proposals as part of the course. *(Prerequisites: SBSF 8417 and either KAM V or KAM VI. Students must take this course before nominating their dissertation supervisory committee, but should not take it until they are ready to develop the dissertation prospectus.)*

**PPPA 8437 Research Seminar III: Data Analysis (5 cr.)**
This course covers descriptive statistics; statistical inference; and quantitative techniques, including analysis of variance and covariance, multiple linear regression, and various nonparametric techniques. Other topics include software for data analysis, qualitative data reduction and analysis, data management techniques, and integrating qualitative and quantitative data for analysis. *(Offered winter and summer quarters. Attendance at a designated Walden residency is required. Prerequisite: SBSF 8417.)*

**PPPA 8500 Organizational Theory and Behavior (4 cr.)**
This course focuses on behavior in organizations as influenced by individual differences, group processes and interactions, and organizational processes. Skills and abilities essential for effective management in changing organizational contexts are emphasized. Topics examined include motivation, productivity, diversity, group development, team building, decision-making and communication processes, power and politics, leadership, job design, and organizational culture.

**PPPA 8600 Human Resource Management (4 cr.)**
This course is a survey of philosophy, approaches, and systems of managing people in government and nonprofit organizations. It includes historical developments, personnel management practices and behaviors, and current issues. It examines recruitment, classification, compensation, training, evaluation, and labor-management relations functions.

**PPPA 8700 Policy Analysis (4 cr.)**
This course provides a broad perspective on the policy process, recognizing that both public and nonprofit administrators are intimately involved in executive and legislative/board policy- and decision-making. It focuses on how policy is initiated, researched, shaped for decision-making, decided, implemented, and then evaluated. Balanced attention is given to the dynamics of the policy-making process itself and the analytical and communications tools that equip professionals at many levels in organizations to be effective actors in this process.

**PPPA 8800 Strategic Management of Information (4 cr.)**
This course is designed to give students an in-depth understanding of information resources and their implications for the public and nonprofit sectors. Advancements in information technology, which are making e-government a reality and are causing administrators to rethink their approach to service
delivery, are explored as well as new ways of structuring organizations for greater productivity. The human systems and organizational culture impacts of information technology are also examined.

PSYC

**PSYC 5999 Continuing Project (non-credit)**
Students enrolled in master’s-level, course-based programs, and who have already registered for the required number of thesis or research project credits, should register for 5999 Continuing Project to complete the thesis or research project proposal or manuscript. Students will be automatically registered for PSYC 5999 after initial registration until the thesis is approved. *(Prerequisites: All master’s coursework and all thesis credits. Cross-listed with COUN 5999)*

**PSYC 6000 Foundations for Graduate Study in Psychology (6 cr.)**
This course introduces students to Walden University and to the requirements for successful participation in an online curriculum. It provides a foundation for academic and professional success as a scholar-practitioner and social change agent. Course assignments focus on practical application of writing and critical-thinking skills and promote professional and academic excellence as they relate to practice in psychology and counseling. *(Previously listed as PSYC 8000 Foundations for Graduate Study in Psychology.)*

**PSYC 6205 History and Systems of Counseling and Psychology (5 cr.)**
This course focuses on the historical and philosophical roots of psychology and counseling. Topics include structuralism, functionalism, behaviorism, psychoanalysis, gestalt, and existentialism, as well as contemporary perspectives including evolutionary psychology, positive psychology, postmodernism, and feminist psychology. Themes of diversity and multiculturalism in psychology and counseling are highlighted within each of the perspectives. *(Cross-listed with COUN 6205. Previously listed as PSYC 6205 History and Systems in Psychology.)*

**PSYC 6210 Advanced General Psychology (5 cr.)**
This course introduces students to the historical and contemporary schools of psychology and key contributors to the profession of psychology over the past two centuries in the United States. This course includes a discussion of the methods used to study human thought, experience, and behavior with special consideration given to gender and cultural issues. Major topics include biological bases of behavior, learning and memory, cognition, motivation, lifespan development, theories of personality, stress and coping, psychological disorders, and social psychology; themes of diversity are highlighted throughout the course.

**PSYC 6215 Lifespan Development (5 cr.)**
This course provides students with an overview of development through the lifespan, including childhood, adolescence, adulthood, and aging experiences. Physical, social, emotional, and cognitive issues are covered, as well as the expected developmental milestones during each of these phases of development. The latest research in attachment theory, brain research, and aging is included, and themes of diversity issues related to developmental research are highlighted throughout the course. *(Cross-listed with COUN 6215. Previously listed as PSYC 6215 Developmental Psychology.)*

**PSYC 6220 Psychology of Personality (5 cr.)**
This course introduces students to the major theories of personality and personality assessment approaches. Research that supports various theories is presented. Basic concepts and principles of the
various schools of thought are discussed. Major topics include psychoanalytic, biological, behaviorist, learning, social-cognitive, trait and skill, humanistic, and existential aspects of personality, as well as individual, cultural, and gender differences in personality. Themes of diversity are highlighted throughout the course.

**PSYC 6225 Biopsychology (5 cr.)**
This course reviews the structure and functions of the central and peripheral nervous systems and explores the impact of neurobiology, endocrinology, and physiology on human behavior. Major topics include brain functioning, including exploration of neural conduction, effects of neurotransmitters, sensory systems, and mechanisms of attention, memory, perception, and language. Issues related to neuroplasticity, lateralization, and regeneration are addressed.

**PSYC 6230 Psychology of Learning and Memory (5 cr.)**
This course introduces students to the concepts of learning (commonly associated with mechanistic and behavioral approaches) and memory (commonly associated with constructivist and cognitive approaches). The course examines the historical and current approaches to understanding the individual, environmental, and social processes that determine knowledge and behavior change. Major topics include exploration of neurophysiological, biochemical, environmental manipulation and reinforcement, modeling, simulation, introspection, and phenomenological methods used to investigate the learning process. Individual differences and influence of culture on learning and memory are also presented.

**PSYC 6235 Cognitive Psychology (5 cr.)**
This course describes the historical evolution of complex cognitive processes and introduces students to the major cognitive theories and their applications to research in human learning. Major topics include research on higher order mental processes, such as perception, learning, memory, problem-solving, categorization, decision-making, and language. The course examines individual and cultural differences in learning styles and highlights aspects of learning related to diversity.

**PSYC 6240 Human Motivation (5 cr.)**
This course provides an overview of biological, behavioral, and cognitive approaches to motivation and includes an exploration of major theorists and their theories. The course emphasizes both conceptual understanding of theories associated with motivation and their applications to the practice of psychology. Major topics include physiological, learning, cognitive, and emotional aspects of motivation. Themes of diversity are threaded throughout the course.

**PSYC 6245 Social Psychology (5 cr.)**
This course provides students with an overview of classic and contemporary topics in social psychology with a focus on how social contexts influence and shape individual behavior. Topics covered include research methods in social psychology, the relation of self and culture, person perception, attitudes and their relation to behavior, attribution theory, persuasion, conformity and obedience, interpersonal attraction, prejudice, aggression, group dynamics, intergroup relations, and multiculturalism. The course is presented with a focus on cross-cultural similarities and variations in the impact of context on behavior.

**PSYC 6250 Group Process and Dynamics (5 cr.)**
This course prepares students to work with groups in various settings. It examines group theory, process, and dynamics. Using relevant literature, multimedia resources, and a scholar-practitioner model, students develop an understanding of culturally and contextually relevant group practice, group leaders’ roles and responsibilities, the relevance and purpose of group work, and strategies for using groups to foster social change. Students also participate in a group experience in their community. (*Cross-listed with COUN 6250. Previously listed as PSYC 6250 Group Dynamics.*)
**PSYC 6290 Independent Readings (1–5 cr.)**
This course provides students an opportunity to examine a topic area of interest in more depth than is provided in the course offerings. Students work with the course faculty to design a syllabus that guides the independent readings project. Content must include theoretical and empirical research literature that addresses implications related to diversity and professional practice. This course may be selected only once during the student’s Program of Study and cannot be used to replace a course that currently exists in the catalog. *(Prerequisite: Approved petition to academic advising.)*

**PSYC 6300 Critical Thinking and Writing in Psychology (5 cr.)**
This course provides an introduction to critical thinking as it relates to scientific thinking. Students will practice critical reading and analysis skills through review of journal articles as well as media publications. Other topics include distinguishing facts and opinions, recognizing overt and covert assumptions as well as how ideology influences critical thinking, identifying bias and biased writing, and understanding the importance of data and evidence. Additionally, students learn and practice skills that lead to effective scientific writing.

**PSYC 6305 Statistics 1 (5 cr.)**
This course provides students with a thorough analysis of basic descriptive and inferential statistical methods commonly used in the social sciences and the skills with which to write, analyze, and critique social science research. Methods include computation and analysis of frequency distributions, measures of central tendency, and statistical hypothesis testing. Statistical tests (and underlying assumptions) include z-score, single-sample, independent-samples and related-samples t tests, analysis of variance, correlation, regression, and chi-square tests. This course includes an introduction to and use of the software Statistical Package for the Social Sciences (SPSS).

**PSYC 6310 Research Design (5 cr.)**
This course provides students with a foundation in the design of qualitative, quantitative, and mixed-method approaches to psychological research. Students learn the strengths and limitations of each method, and the circumstances under which each approach would be considered most appropriate. Students learn how to identify a topic for research and conduct a literature search, and the importance of scholarly writing. Students learn to write an introduction, a purpose for the study, research questions, and hypotheses; to use theory; to define the significance of the study; and to identify procedures for data collection and analysis that lead to the completion of a research prospectus. Students are exposed to legal and ethical issues associated with participant involvement in research. *(Prerequisite: PSYC 6305.)*

**PSYC 6315 Tests and Measurement (5 cr.)**
The course provides students with a comprehensive examination of the psychometric procedures used to develop and validate educational, psychological, and organizational instruments. Topics include normative samples, reliability and validity, test score interpretation, and test development. Professional standards for testing are reviewed and consulted at all phases of the course. Ethical issues in testing, integration of testing in the overall assessment process, overall assessment of individual differences, diversity issues in testing, and cultural fairness and bias in testing are also explored. *(Prerequisite: PSYC 6305.)*

**PSYC 6331 Interviewing and Observational Strategies (5 cr.)**
This course focuses on principles and skills related to interviewing and observation as well as related legal, ethical, and cultural issues. Students gain practice in conducting interviews, making behavioral observations, collecting and interpreting data during an interview, and developing written reports of findings. *(Cross-listed with COUN 6331.)*
**PSYC 6341 Psychological Assessment: Cognitive (5 cr.)**
This course introduces students to basic skills related to cognitive and academic achievement testing. Students are presented with theoretical basis, skill sets, and examples, and learn to establish and maintain rapport in a testing situation; administer, record, and score specific measures of cognitive ability and academic achievement; interpret test results; and summarize results in a written report. The focus is on applied aspects of psychological testing. This course has a skill-based, face-to-face residency seminar component. *(Prerequisites: Matriculation into Counseling, Clinical, or School licensure specializations, or M.S. in Mental Health Counseling students by permission; a grade of B or better in PSYC 6315 or in another graduate course in tests and measurements taken no more than 3 years prior to registering for this course.)*

**PSYC 6351 Psychological Assessment: Personality and Social-Emotional (5 cr.)**
This course introduces students to basic skills related to assessment of personality and social-emotional functioning. Students are presented with theoretical basis, skill sets, and examples, and learn to establish and maintain rapport in a testing situation; administer, record, and score specific measures of personality and social-emotional functioning; interpret test results; and summarize results in a written report. The focus is on applied aspects of psychological testing. This course has a skill-based, face-to-face residency seminar component. *(Prerequisites: Matriculation into Counseling, Clinical, or School licensure specializations, or M.S. in Mental Health Counseling students by permission; a grade of B or better in PSYC 6315 or in another graduate course in tests and measurements taken no more than 3 years prior to registering for this course.)*

**PSYC 6390 Thesis (10 cr. — 5 cr. per term for 2 terms)**
This course provides students with the tools to integrate their Program of Study logically and comprehensively into an in-depth exploration of a topic of research interest. The goal of the course is the completion of the M.S. thesis. Students complete the thesis independently under the mentorship of a thesis chair. The thesis can be either a critical literature review with a proposed research design or an empirical study. After 10 credits of PSYC 6390, students must register for PSYC 5999 until approval of thesis. *(Prerequisites: PSYC 6305, 6310, 6315, and an additional three courses. Cross-listed with COUN 6390.)*

**PSYC 6701 Culture and Psychology (5 cr.)**
This course explores the foundations of cross-cultural work from various disciplines in the field of psychology. The cross-cultural application of traditional theories and models will be addressed. Topics include the distinction between universal as well as culture-specific phenomena related to personality development, social behavior, and research approaches, gender, issues of acculturation, and cultural variations related to abnormal, clinical, social, and organizational psychology.

**PSYC 8300 Philosophical Foundations in Psychological Research (5 cr.)**
This course introduces students to the nature of scientific discovery and explanation as it applies to the social sciences and to psychology in particular. Topics include the etiology and epistemology of science, the relationship between philosophy and science, the nature of scientific explanation, and the understandings of the progress of science (the “paradigm”). Philosophical movements that influence research and research priorities are reviewed, including positivism, constructivism, and other post-modern research paradigms (including feminist, race, and gay/lesbian psychologies).

**PSYC 8305 Statistics 2 (5 cr.)**
This course reviews and expands on statistical techniques mastered in Statistics 1: t-test, correlation analysis, ANOVA, and chi-square are briefly reviewed. Topics include understanding underlying assumptions and applications of factorial, repeated measures (within groups), and mixed design ANOVA, multiple regression, and logistic regression. Students learn applications necessary for completing doctoral
dissertations and learn to critically read and write about psychological research. All analyses involve the use of the SPSS statistical software package. (Prerequisite: PSYC 6305.)

**PSYC 8306 Statistics 3 (5 cr.)**
This course introduces students to multivariate statistics and their uses in the social sciences. Topics include data screening and cleaning, factorial ANOVA, analysis of covariance, multivariate analysis of variance (MANOVA), discriminant function analysis, multiple regression, logistic regression, path analysis, factor and principle components analysis, and structural equation modeling. Assignments focus on understanding theory and using SPSS to solve problems. (Prerequisite: PSYC 8305.)

**PSYC 8310 Qualitative Analysis (5 cr.)**
This course focuses on five major traditions of qualitative research methodology: phenomenology, grounded theory, ethnography, biography, and case study. In the context of each of the traditions, varying approaches to proposal planning, research design, data collection, data analysis, aspects of quality and verification, ethical and legal issues, and interpretation and presentation of results in the narrative report are examined. Emphasis is on how to design a qualitative research project that could serve as the foundation for thesis or dissertation work. (Prerequisite: PSYC 6305, 6310.)

**PSYC 8315 Program Evaluation (5 cr.)**
This course introduces students to evaluation research. Topics include the history and theory underlying program evaluation, approaches to evaluation, procedures and techniques for entering a group for which one would provide evaluation services, selecting appropriate quantitative and/or qualitative models and techniques used to perform the evaluation, strategies for getting gatekeepers to be invested in the development of the research and in the outcomes, demonstration of program effectiveness, and dissemination of results to stakeholders. (Prerequisites: PSYC 6305, 6310.)

**PSYC 8320 Advanced Methods in Mixed Qualitative-Quantitative Research Designs (5 cr.)**
This course focuses on the use of both qualitative and quantitative research designs in psychological research. The course begins with a broad discussion of paradigms that guide qualitative and quantitative research traditions, including logical positivism, post-positivism, pragmatism, and constructivism. A number of methods common to each tradition are reviewed, and mixed-method approaches are explored in depth, including strategies for collecting, analyzing, and disseminating data, as well as how both methods can be incorporated at all stages of the research project. Emphasis is on how to design a mixed-method research project that could serve as the foundation for dissertation work. (Prerequisites: PSYC 6305, 6310, 8310. Previously listed as PSYC 8320 Mixed Qualitative-Quantitative Research Designs.)

**PSYC 8361 Advanced Psychological Testing (5 cr.)**
This course focuses on the application of multidimensional approaches to assessment, empirically based diagnosis and decision-making, and empirically based interventions or treatment based on assessment. Students administer, score, record, and interpret psychological tests. They also learn to diagnose and make treatment recommendations using an array of assessment instruments appropriate to their specialization. Students apply these skill sets to write integrated, comprehensive psychological reports. This course has a required face-to-face residency component. (Prerequisites: PSYC 6341, 6351 with a grade of B or better and PSYC 8719, 8720, or 8721.)

**PSYC 8700 Psychology and Social Change (5 cr.)**
This course focuses on the theories of social and personal change. Topics include power and social inequalities, ethnic inequalities, global environment and social change, issues related to gender and sexism, and homophobia. In addition, students are presented with impact of social change theories on children, families, and societies. The concepts of change agent and change advocate are explored as well as the role of the psychologist as change agent.
PSYC 8705 Ethics and Standards of Professional Practice (5 cr.)
This course examines the origins of professional codes of ethics and standards of practice. Ethics and standards of practice are explored in depth. Topics include confidentiality, client-provider relationships, issues in assessment, ethical issues related to psychotherapy, ethics of research, and ethics involved in working with diverse populations. Additionally, students are introduced to forensic psychology and issues related to establishing a practice. The course also explores how cultural factors are addressed in various ethical codes and the implications for scholar-practitioners.

PSYC 8706 Advanced Social Psychology (5 cr.)
This course provides an advanced analysis of social psychology, including a review of the historical context and cultural grounding of social psychological theory. Special attention is given to sociocultural psychology and the broad base of knowledge related to history, research methods, and applications to social and cultural processes. Topics include small-group processes and dynamics and shared cognition, attitude development and shifting, social cognition and emotion, self-concept and self-regulation, conformity, affiliation and independence in groups, group performance, leadership, cross-cultural psychology, and biopsychosocial diversity. (Prerequisites: PSYC 6245, 6305, 6310.)

PSYC 8710 Clinical Neuropsychology (5 cr.)
This course provides an introduction to the field of clinical neuropsychology. Topics include cortical organization (including functions, anatomy, and neuropathology) and higher cortical functions of memory, language, emotions, attention, and perception in disordered brain functions in adults. Neuropsychological approaches, including cognitive neuropsychology, are explored. (Prerequisite: PSYC 6225.)

PSYC 8712 Clinical Child Neuropsychology (5 cr.)
This course introduces students to clinical child neuropsychology. Topics include the scientific, theoretical, and applied foundations of brain-behavior relations in children with neurological, learning, and/or behavioral disorders. The focus of the course is on a multidimensional, ecological, and sociopsychological perspective relative to prevention, diversity, identification, and intervention with children. (Prerequisites: PSYC 6215, 6225.)

PSYC 8718 Psychology of the Exceptional Individual (5 cr.)
This course examines the cognitive, social-emotional, and psychomotor characteristics of individuals significantly deviating from the norm in behavior and/or adjustment. Topics include understanding individuals with learning disabilities (including emotional, behavioral, and intellectual disorders; autism; brain injury; hearing and vision loss; physical disabilities; and health disorders) and those who are gifted and talented. Inclusion, transition to adulthood, and multicultural diversity are explored. The focus of the course is on skills for developing research-based educational and therapeutic interventions.

PSYC 8719 Developmental Psychopathology (5 cr.)
This course examines formal psychopathology, emotional, and behavioral disorders and presents the classification systems of infants, children, and adolescents. Topics include contrasting models of psychopathology, classification and epidemiology of childhood psychopathology, co-morbidity rates, differential issues from the current diagnostic manual’s outcome of childhood disorders, therapeutic approaches and their efficacy, and developmental resilience. Case studies are used to illustrate diagnostic issues. (Prerequisites: PSYC 6220, 6225.)

PSYC 8720 Diagnosis and Assessment (5 cr.)
This course is an overview of what is commonly referred to as abnormal psychology; however, what constitutes normalcy is considered from multiple perspectives. Specifically this is an applied course,
where students explore the application of diagnostic criteria in various mental health work settings, such as schools, rehabilitation facilities, community agencies, and private practices. Environmental and biological factors contributing to behavioral disorders are considered using the scholar-practitioner model. Techniques are reviewed for the diagnosis and treatment of cognitive, emotional, and developmental disorders, as well as for psychophysiological and psychosocial problems. Multicultural factors that complicate diagnosis are reviewed. *(Cross-listed with COUN 8720. Previously listed as PSYC 8720 Abnormal Psychology.)*

**PSYC 8721 Advanced Psychopathology (5 cr.)**
This course provides an in-depth examination of current theory and research associated with major psychological disorders and with diagnosis. The major disorders are explored, including substance abuse and psychotic, mood, personality, somatoform, anxiety, mood, dissociative, and eating disorders. Application of the current diagnostic manual to actual clinical situations is emphasized. Current criticisms of the diagnostic system and discussion of alternative models are addressed. *(Prerequisite: PSYC 6220.)*

**PSYC 8722 Counseling and Psychotherapy Theories (5 cr.)**
This course summarizes the history and explores the primary concepts of the major approaches to counseling and psychotherapy in current use. The empirical foundations of each theory are examined, and examples are supplied showing how each method is applied to clients. Limitations of each approach are also explored. *(Cross-listed with COUN 8722. Previously listed as PSYC 8722 Theories of Psychotherapy.)*

**PSYC 8723 Multicultural Counseling (5 cr.)**
This course is designed to increase students’ awareness and knowledge of, and skills related to, multicultural counseling and the delivery of psychological services. Students explore diversity and identity issues and discuss their impact on the therapeutic relationship. The application of traditional theoretical orientations and current multicultural theories to culturally diverse groups is addressed. Topics include race and ethnicity, sex and gender, sexual orientation, social class, and age and ability. *(Cross-listed with COUN 8723.)*

**PSYC 8724 Child Psychotherapy (5 cr.)**
This course explores the psychological treatment of children from an array of theories and techniques, including play therapy. Issues of playroom organization, intake interviews, psychological assessment, and intervention are addressed. Typical play behaviors of children at various levels of development, cross-cultural aspects of play, and their meanings are explored. Treatment, evaluation, cultural sensitivity, and ethical practice with children are also presented. *(Prerequisite: PSYC 6215.)*

**PSYC 8725 Group Therapy (5 cr.)**
This course provides a comprehensive review of clinical and counseling approaches to group therapy. The theoretical bases of different approaches to group therapy, including psychoanalytic, existential, person-centered, gestalt, transactional, behavioral, rational-emotive, and reality therapy, are examined. Focus is on various types of groups, the efficacy of using group therapy as the treatment method with various multicultural populations, and the stages of group development.

**PSYC 8726 Marriage and Family Therapy (5 cr.)**
This course introduces students to theoretical perspectives and techniques, classical schools of thought, and recent developments in marriage and family therapy. Culture, gender, and ethnicity factors in family development are explored. Theoretical frameworks in marriage and family therapy, including psychosocial, psychodynamic, transgenerational, strategic, cognitive-behavioral, and social constructionist models, are reviewed and compared. The roles of culture, spirituality, and values in understanding families are explored. *(Cross-listed with COUN 8726.)*
PSYC 8727 Religion and Spirituality in Counseling and Therapy (5 cr.)
This course provides an introduction to significant religious and spiritual movements, the interactions and divergences between religion and spirituality, and how these issues can emerge in counseling or therapy. Topics explored include values, assessment of religious manifestations, relations with clergy/spiritual leaders, use of bibliographic materials, ways to deal with religious/spiritual materials and themes presented by clients, cultural considerations that may intersect with religion and spirituality especially in relation to race, ethnicity, and nationality; sex and gender roles; sexual orientation; and treatment techniques.

PSYC 8728 Substance Abuse Therapies (5 cr.)
This course examines psychological aspects of addictions involving alcohol, prescription medications, and illegal substances. Current research in the field of dependency and addiction is explored. Topics include diagnosis, models of treatment, treatment planning, use of group and family treatment plans, and efficacy of treatment. Strategies to promote change, including the transtheoretical model of behavior change, are discussed. (Cross-listed with COUN 8728.)

PSYC 8729 Grief Therapy (5 cr.)
This course examines grief theory and its processes, tasks, and mediating factors, including age of the bereaved and deceased, type of death, and relationship with the deceased. Topics include coping and coping interventions, dealing with grief in childhood and adolescence, and dealing with grief associated with loss of children. Diversity issues related to race, ethnicity, nationality, sexual orientation, sex and gender roles, and spirituality and religion are explored. Emphasis is placed on research-based intervention techniques.

PSYC 8730 Advanced Grief Therapy (5 cr.)
This course explores grief dynamics resulting from complicated grief, trauma, multiple loss, and disasters (both natural and man-made). The focus is on acute stress and post-traumatic stress disorder (PTSD), including the consideration of cultural factors in the assessment and treatment of those diagnosed with PTSD. (Prerequisite: PSYC 8729.)

PSYC 8732 Medical Crisis Counseling (5 cr.)
In this course, students discuss stress and psychological issues faced by patients and their families when coping with a life-threatening illness. Topics include points of access in the disease process as well as the understanding of many diseases’ characteristics and treatments, with emphasis on appropriate interventions. Issues such as preferential treatment or lack thereof based on social class, visible family/social support, age, race/ethnicity/nationality, sexual orientation, and religion/spirituality are explored.

PSYC 8741 Psychopharmacology (5 cr.)
This course provides an overview of the spectrum of psychotropic medications and their use in the treatment of mental and behavioral disorders. Topics include the role of the psychologist in prescribing medication and the efficacy of combining medication and psychotherapy. The focus is on the treatment of depression, anxiety, bipolar disorder, obsessive-compulsive behavior, schizophrenia, and childhood disorders; other psychological disorders as described in the DSM-IV-TR are reviewed. (Prerequisite: PSYC 6225.)

PSYC 8745 Health Psychology (5 cr.)
This course reviews the field of health psychology with a focus on the biopsychosocial model; behavioral and biomedical theories are also discussed. Topics include the effect of psychological (personality), behavioral (health behaviors and coping), and social factors (stress and physician-patient relationships) on
physical health and wellness. The course specifically addresses cardiovascular and immune health with a
discussion of heart disease, stroke, cancer, and HIV/AIDS.

**PSYC 8746 Behavioral Nutrition (5 cr.)**
This course examines the interaction between behavior and nutrition. Topics include fundamental
principles of human digestion and nutrient metabolism, specific nutrient requirements of the brain and
brain metabolism of nutrients, and effects of nutrients on brain function. Using this background, students
critically examine current trends in behavioral nutrition and conduct nutritional assessments.
*(Prerequisite: PSYC 6225.)*

**PSYC 8747 Psychoneuroimmunology (5 cr.)**
This course examines current theory and interdisciplinary (psychological and medical) research
associated with psychoneuroimmunology (PNI). Topics include the mind/body interaction, its effects on
overall health through modulation of the immune system, and mind/body interventions. Recent advances
in medical science that have contributed to our knowledge of biological processes and how the mind can
be used as a potent force in modifying the biological mechanisms involved in wellness and illness are
explored. *(Prerequisite: PSYC 6225.)*

**PSYC 8748 Stress and Coping (5 cr.)**
This course examines the literature related to contemporary theories on the perception of stress, appraisal
of stressors, ways of coping, and the psychophysiological mechanisms involved in the stress response.
Topics focus on psychoneuroimmunology, behavioral nutrition, psychophysiology, traumatic stress,
chronic pain, and stress-related psychophysiological and medical disorders as they relate to stress and
coping. *(Prerequisite: PSYC 6225.)*

**PSYC 8750 Foundations of Industrial/Organizational Psychology (5 cr.)**
This course introduces students to the field of industrial/organizational psychology. The major focus is on
organizational theories and practices impacting the individual, group, and organization in a variety of
industrial and organizational settings. Students learn to translate research and theory into practice in areas
such as personnel selection, training, performance, and management, as well as in team and
organizational development and change.

**PSYC 8752 Psychology of Organizational Behavior (5 cr.)**
This course examines the application of behavioral theories in organizational settings. The focus is on
individual, group, and organizational behavior. Topics include individual differences in employee
motivation and job satisfaction, group development, team building, organizational leadership, and
organizational design, culture, and development. Students acquire a broad knowledge base in
organizational psychology, its research, and its applications. *(Prerequisite: PSYC 8750.)*

**PSYC 8753 Vocational Psychology and Counseling (5 cr.)**
This course examines major career development theories, assumptions, and implications for practice.
Career information programs and systems in terms of their application to personnel assessment,
counseling, development, and placement are reviewed. Focus is placed on the implications of individual
differences in cultural, gender, and age-related issues. Students obtain a theoretical and practical basis for
supporting individuals in vocation selection and career development. *(Cross-listed with COUN 8753.)*

**PSYC 8754 Personnel Psychology in the Workplace (5 cr.)**
This course explores the application of psychological theory and practice to human resources activities in
organizations. Topics include job analysis and design, employee selection and placement, training and
development, performance management and appraisal, and legal and ethical considerations in human
resources management. *(Prerequisite: PSYC 8750.)*
PSYC 8755 Leadership and the Process of Change (5 cr.)
This course provides an extensive consideration of leadership theories. Topics include definitions of leadership, major theoretical leadership models, and contextual and situational factors related to leadership. Special consideration is given to effective leadership issues and practices during the process of organizational change. Various perspectives on leadership and its role in the achievement of organizational, group, and team goals are explored. (Prerequisite: PSYC 8750.)

PSYC 8756 International/Cross-Cultural Issues in Organizations (5 cr.)
This course focuses on workplace issues arising from diverse cultural contexts. Topics include international and cultural comparisons of work motivation, communication, leadership, and decision-making, as well as organizational structures and characteristics. Sources and management of conflict, as well as conflict resolution strategies, are explored.

PSYC 8760 Educational Psychology (5 cr.)
This course examines the variables related to teaching and learning. Topics include teaching methods, educational achievement, learning environments, curriculum development, and characteristics of teachers and learners. Educational assessment, environmental issues, and educational research techniques are also explored.

PSYC 8762 Teaching of Psychology (5 cr.)
This course examines techniques and issues related to teaching psychology at the college/university level. The primary focus is on teaching skills, developing rapport with students, managing the course, and managing the classroom. Classroom communication and ethical issues relevant to both faculty and students are also covered.

PSYC 8763 Principles of Instructional Design (5 cr.)
This course presents a critical analysis of various instructional methods and techniques. It provides an overview of major theories of learning and an analysis of specific instructional applications. Students apply their prior knowledge of learning, development, and cognition to understanding factors related to instruction and instructional design. (Prerequisites: PSYC 6230 or 6235, 8760.)

PSYC 8764 Instructional Design for Online Course Development (5 cr.)
This course explores instructional design and delivery of online courses, issues related to assessment and evaluation in a distance-learning environment, and appropriate and systematic use of technology in online learning venues. Issues such as learning styles and instructional strategies in the online environment, alternatives to the online lecture, and effective course objectives and discussion questions are explored. (Prerequisite: PSYC 8763.)

PSYC 8780 Seminar in School Psychology (5 cr.)
This course introduces prospective school psychologists to the field of school psychology. Topics include the role and function of the school psychologist; legal, ethical, and professional issues in school psychology; fieldwork experiences; research methods in school psychology; and emerging technologies in school psychology.

PSYC 8784 Psychological Consultation (5 cr.)
This course examines the history, theory, process, and methods in the field of psychological consultation. It reviews the qualifications and techniques required by the psychologist to consult in a variety of settings, including the courtroom, business and industry, and educational, mental health, and medical settings.
**PSYC 8785 Prevention: Research and Practice (5 cr.)**
This course provides an inquiry into prevention and intervention programs for individuals, groups, and communities. Students consider cultural, social, psychological, family, organizational, and political factors bearing on the mental health and development of people in various settings, including schools, communities, and organizations. Theoretical frameworks guiding prevention and intervention are explored, including constructivist and ecological-developmental perspectives. Students gain experience in developing prevention-oriented programs within diverse systems. (*Cross-listed with COUN 8785.*)

**PSYC 8805 Holistic Psychology (5 cr.)**
This course provides students with a foundation in holistic psychology. Students examine topics in holistic and transpersonal psychology, as well as influences of theory and research in the areas of spirituality and mind/body relationships. Topics include states of consciousness, emotional and psychosomatic disorders, spiritual emergencies, death and dying, and integral psychology. Focus is placed on integration of perspectives.

**PSYC 8810 Community Psychology (5 cr.)**
This course introduces students to the basic concepts and practice of community psychology. Guiding values and assumptions of the field, basic ecological concepts, and models of intervention are examined. Topics include diversity in community psychology, social change, primary and secondary prevention, community mental health, empowerment, stress, and resiliency.

**PSYC 8815 Contemporary Gerontology/Geriatric Psychology (5 cr.)**
This course provides a multidisciplinary approach to the study of aging in contemporary societies. Biological, psychological, social, and societal contexts of aging are examined. Topics include historical and cross-cultural perspectives on aging, social theories of aging, managing chronic diseases, cognitive changes associated with aging, mental health issues, sexuality, and social interactions.

**PSYC 8820 Successful Practice Management (5 cr.)**
This course examines management principles and practices for applied and consulting psychologists. Topics include client goal setting; systematic intake procedures; developing treatment/intervention plans; treatment coordination and progress assessment; scheduling and billing; practice demographics; risk management; staying current with research, legal, and ethical issues; and staff supervision. (*Prerequisite: PSYC 8705.*)

**PSYC 8825 Psychology of Gender (5 cr.)**
This course introduces students to theories and research on gender role expectations and their influence on the psychosocial developmental experience of women, men, and children. Current gender research is applied to understanding achievement, work, relationships, sexuality, violence, and physical health and illness. Responses of women and men to life stresses, women as clients in psychotherapy, and the increasing role of gender research in the mental health professions are emphasized.

**PSYC 8830 Psychology of Sexuality (5 cr.)**
This course provides an exploration of sexuality from a variety of perspectives, including historical, psychological, sociological, anthropological, biological, public health, and media and cultural studies. Traditional understandings of sexuality (including male and female sexual anatomy, physiology, and response; variations across the life span; sexual communication; love and interpersonal attraction; and sexual “disorders”) are examined using a variety of theoretical perspectives, including essentialist and constructivist notions of sex, sexuality, and sexual identity.
PSYC 8860 Independent Reading (1–5 cr.)
This course provides students an opportunity to examine a topic area of interest in more depth than is provided in the course offerings. Students work with a faculty member to design a syllabus that defines the scope of the learning and participate in classroom experience. (Prerequisite: Approved petition to academic advising.)

PSYC 8861 Field Experience in Health Psychology (5 cr.)
The purpose of this course is to provide a supervised training experience that prepares students to successfully function in the role of professional health psychologists. The field experience emphasizes the integration of theory and research through applied work in a variety of settings and situations. Students are mentored through a professional relationship with a supervising researcher, physician, or health psychologist. The student engages in critical thinking, conducts research, provides consultation, and instructs within a variety of professional or research settings. Students should secure a field experience consistent with their area of expertise and research. A total of 120 hours of experience is required and must be completed within one quarter. (Prerequisites: PSYC 6305, 6310, 8745, and permission of the health psychology coordinator.)

PSYC 8871 Practicum (6 cr. — 3 cr. per term for 2 terms)
The practicum provides students the opportunity to engage in a supervised experience that integrates theory and research with practice. The practicum experience includes guided development of intermediate conceptual, assessment, intervention, and evaluation skills; awareness of professional and ethical issues; professional and interpersonal growth; development of cultural competence; and effective use of supervision. Students must secure a practicum appropriate to their specialization, and the practicum must meet the current requirements of the state psychology board to which the student intends to apply. The practicum must be designed for a period of no fewer than 750 hours, to be completed over a minimum of two terms. Students participate in an online classroom experience. (Prerequisite: Completion of the practicum application and approval of the field training coordinator.)

PSYC 8882 Internship (12 cr. — 3 cr. per term for 4 terms)
The internship provides a supervised training experience that prepares students to successfully function in the role of a professional psychologist and/or counselor. Internship experiences emphasize the integration of theory and research through applied practice in a variety of settings and situations. Interns are mentored through a professional relationship with a supervising psychologist. They learn how to effectively use and understand a supervisory relationship, engage in critical thinking, conduct assessments, implement evidence-based interventions, evaluate intervention efficacy, engage in professional consultation, and function within professional ethical standards. Interns also participate in didactic training. Internship is the final component of advanced applied professional training for students in licensure specializations, prior to graduation. Students must secure internships appropriate to their specialization, and the internship must meet the current requirements of the state psychology board to which the student intends to apply. A total of 2,000 hours is required. Internships may be designed as a part-time or a full-time experience (minimum of 15 hours per week) but must be completed within a 2-year time frame. Students participate in an online classroom experience. (Prerequisites: PSYC 8871, completion of the internship application, and approval of the field training coordinator.)

PSYC 8900 Advanced Seminar in Psychology (1–5 cr.)
This is an advanced-level professional seminar with emphasis on current and emerging psychological theory, research, and/or practice; topics will vary. This course may have a residency seminar, depending on the topic. (Prerequisites: Vary by topic.)
**PSYC 8910 Introduction to Forensic Psychology (5 cr.)**
This course provides students with a broad overview of the field of forensic psychology. Topics include ethical considerations, training and practice considerations, expert testimony, approaches to forensic assessment, high-risk occupational evaluations, eyewitness testimony, jury selection, child custody evaluations, assessment of childhood trauma, competency issues, sexual predator evaluation, violence risk assessment, responsibility, and various other evaluation and assessment issues unique to forensic psychology. *(Prerequisites: PSYC 6220, 6341, 6351, 8720, 8722.)*

**PSYC 8912 Mental Health Law (5 cr.)**
This course examines several different aspects of the law related to mental health issues. Laws and court decisions that affect the practice of psychology, such as the Tarasoff ruling, mandated reporting, and the Health Insurance Portability and Accountability Act (HIPAA) are addressed, as are the many areas of law that constitute forensic psychological practice including civil matters (such as personal injury and civil competency issues) and criminal matters (such as competency to stand trial, criminal responsibility, diminished capacity, and death penalty issues). *(Prerequisites: PSYC 8910.)*

**PSYC 9000 Dissertation Research (27 cr. — 2 cr. first term; 5 cr. for remaining 5 terms)**
This course sequence offers doctoral students the opportunity to integrate their Program of Study into an in-depth exploration of an interest area that includes the completion of a research study. Students complete the dissertation independently, with the guidance of a chair and committee members. During the first term, students write the prospectus. During the remaining quarters, students work with a research mentor (dissertation chair) to develop the remaining chapters of the dissertation, complete an application for institutional review board approval, collect and analyze data, and complete the dissertation. During the final quarter, students prepare the dissertation for final review by the university and conclude with an oral defense of their dissertation. After 27 credits of PSYC 9000, students must register for PSYC 9999 until completion of the dissertation. *(Prerequisite for first quarter: May be concurrently enrolled in last quarter of coursework but not concurrent with PSYC 6305, 6310, 6315, 8305, 8310, 8315, or any 6000-level coursework. Previously listed as PSYC 9010, 9020, 9030, 9040, 9050, 9060.)*

**PSYC 9999 Continuing Research (non-credit)**
Students enrolled in doctoral-level, course-based programs, and who have already registered for the required 27 dissertation credits but have not yet completed the dissertation must register for this course until completion. Students will be automatically registered for subsequent terms of PSYC 9999. *(Prerequisites: 27 credits of PSYC 9000.)*

**PUBH**

**PUBH 5999 Continuing Project (non-credit)**
Students enrolled in master’s-level programs who have already registered for the required number of thesis credits must register for PUBH 5999. Students will be automatically registered for PUBH 5999 until the thesis is approved. *(Prerequisites: All master’s coursework and 9 credits of PUBH 6610.)*

**PUBH 6000 Foundations for Graduate Study in Public Health (6 cr.)**
This course provides students with the skills needed to be successful as graduate students and professionals in public health. Students become familiar with the university and the public health programs, academic policies and procedures, resources, and learning in the online environment. Students develop academic and professional skills, such as scholarly writing, critical thinking, goal setting, and library research. This course also explores public health in the United States from a systems approach.
Students explore various attributes of public health, including its history, mission, roles, core functions, infrastructures, resources, and intergovernmental relationships. Students also develop an understanding of the concepts of the population health perspective and disease prevention. Current and future challenges for public health, including disaster preparedness, are examined. *(Prerequisite: Admission to one of the following programs: M.P.H. or Ph.D. in Public Health.)*

**PUBH 6105 Social and Behavioral Dimensions of Health (4 cr.)**  
This course presents a view of the major social variables that affect population health (e.g. gender, social class, sexual orientation, race, family, behavioral risks, etc.). Students will examine the health consequences of social and economic policies, the potential role of specific social interventions, and the theoretical and conceptual frameworks from sociology and psychology in their application to public health problems.

**PUBH 6110 Principles of Biostatistics (4 cr.)**  
This course studies the application and interpretation of biostatistics. Topics include descriptive statistics, graphics, diagnostic tests, probability distributions, inference and significant tests, as well as association, linear, logistic regression, and life tables.

**PUBH 6120 Principles of Epidemiology (4 cr.)**  
This course studies the principles of epidemiology through interpretive studies of health in human populations. This includes the design, implementation, analysis, and interpretation of epidemiological studies, as well as the incidence and prevalence of disease within the sociocultural context of populations and their diverse environments. *(Prerequisite: PUBH 6110.)*

**PUBH 6130 Health Care Organization, Policy, and Administration (4 cr.)**  
This course examines the development of health care policies and the administration of health care organizations, including the legal basis for public health practice. Focus is given to public policy, economics, organizational behavior, political science, and the national and international health policies of the present organization.

**PUBH 6140 Fundamentals of Environmental Health and Risk Assessment (4 cr.)**  
This course examines the major human activities and natural events which lead to the release of hazardous materials into the environment. Major topics include the causal links between chemical, physical, and biological hazards in the environment in regard to their impact on human health. Also examined are the basic principles of toxicology dose-response relationships; the absorption, distribution, metabolism, excretion of chemicals; and the overall role of environmental risks in the pattern of human disease.

**PUBH 6200 Advanced Psychosocial Theories of Health and Health Behavior (4 cr.)**  
This multidisciplinary conceptual grounding in theoretical approaches to health and health behavior emphasizes the use of psychosocial theories in health-related practice, policy-making, and research. Ecological and biopsychosocial models designed to integrate these theoretical perspectives are also addressed. *(Prerequisite: PUBH 6105.)*

**PUBH 6250 U.S. and International Health Care Systems (4 cr.)**  
This course examines international health care system reform. Focus is given to the influence of corporate and governmental agencies in the delivery and financing of health services and the legal issues confronting health care institutions. The course also explores fiscal and public policy forces on national and international health systems and investigates the opportunities and challenges facing the management of community-based health care organizations.
PUBH 6420 Principles of Community Health (4 cr.)
This course studies the issues and challenges associated with the development and assessment of innovative public health intervention in community settings. Topics include multidisciplinary and multicultural participation, the development of health priorities in community settings, and the role of partnerships in program development. (Prerequisite: PUBH 6105.)

PUBH 6430 Social and Behavioral Research Methods (4 cr.)
This course focuses on social and behavioral research methodology, including experimental, quasi-experimental, and qualitative research designs; measurement, sampling, and data collection; and developing and testing grounded theory. Students learn to design social and behavioral research, including program evaluation. (Prerequisites: PUBH 6110, 6120.)

PUBH 6440 Public Health Ethics (4 cr.)
This course provides information on the analysis of ongoing ethical and professional issues in public health research and practice during actual dilemmas and experiences of public health professionals. Topics include informed consent, privacy and confidentiality, dignity and rights of participants, deception, coercion, risks to vulnerable populations, research fraud, and misuse of ideas.

PUBH 6450 Program Planning and Evaluation (4 cr.)
This course examines practical issues in the design and evaluation of program planning models in theory-based community health promotion and education initiatives. Emphasis is given to systematic data collection, analysis, and presentation regarding community needs and program implementation, quality control, efficacy, and cost considerations. (Prerequisites: PUBH 6105, 6110, 6200, 6420, 6430.)

PUBH 6460 Health Education and Community Advocacy (4 cr.)
This course studies the health education policies and interventions of social and behavioral change theories. Course assignments focus on the development of theory-based strategies and emphasize control, participation, efficacy, and empowerment. Topics include partnership models, including media advocacy and marketing strategies. (Prerequisites: PUBH 6105, 6420.)

PUBH 6610 Thesis in Community Health (9 cr.)
This course engages students in the development of a research proposal and a thesis that represents a summary expression of the knowledge they have achieved and integrated from their previous learning experiences in the program. It requires students to focus on an area of interest in community health; define a problem; review the literature on the subject, including appropriate theoretical and conceptual frameworks; detail the methodology for data collection and analysis; collect the data; indicate the findings; and discuss implications and potential solutions for future public health practice or research. After 9 credits of PUBH 6610, students must register for PUBH 5999 until approval of thesis. (Prerequisites: PUBH 6000, 6100, 6105, 6110, 6120, 6130, 6140, 6430, and an approved thesis committee.)

PUBH 6620 Field Practicum in Community Health I (3 cr.)
This course provides an opportunity for a student-arranged practicum in a community health setting that complements students’ academic and professional goals. Supervision by an on-site training preceptor is a critical component of this experience. Over two terms (6620 and 6621), students complete at least 300 field hours for the practicum and an online course that also serves as the culminating experience for the M.P.H. degree. Evaluation is provided by the on-site supervisor and practicum faculty. (Prerequisites: All M.P.H. required coursework and permission of the dean or the dean’s designee.)
PUBH 6621 Field Practicum in Community Health II (3 cr.)
This course is the continuation of PUBH 6620. (Prerequisites: All M.P.H. required coursework, PUBH 6620, and permission of the dean or the dean’s designee.)

PUBH 6630 Directed Readings in Community Health (4 cr.)
This course provides an extensive overview for developing a plan including goals and objectives needed to investigate a topic of interest in community health under the direction of a faculty member. The Agreement will address the examination of theoretical, research, and professional practice literature. This course may be selected only once during a student’s program of study. (Prerequisite: permission of the dean or the dean’s designee.)

PUBH 6920 Health Services Financial Management (4 cr.)
This introductory course focuses on the functional role of the health care finance manager and the basic tools of health care financial decision-making. Topics include financial reporting statements, cost concepts and decision-making, budgeting techniques, cost variance analysis, time valuing of money procedures, capital acquisition, debt and equity financing, and working capital cash management.

PUBH 8010 Promoting Population Health (5 cr.)
This course concentrates on the social foundations for public health and the leadership and research skills needed for effectively organizing and conducting population-based disease prevention and health promotion programs. Topics include the social history of public health and determinants and risk factors for population health; policy analysis and advocacy; building coalitions, alliances, and consortiums; constituency and community mobilization; media communications; social marketing; community education strategies; and diverse populations as well as those with disproportionate disease burdens. (Prerequisite: Required 6000-level curriculum.)

PUBH 8015 Administration and Leadership of Public Health Programs (5 cr.)
This course examines the administration of population-based health programs and the leadership skills needed to work effectively with diverse workforces and communities under varying political and economic conditions. Topics include organizational dynamics, team building, mediation, collaboration, systems thinking and planning, working within political structures, responding to political and economic forces, communicating public health issues, budgeting, funding proposal development, and grants management. (Prerequisite: Required 6000-level curriculum.)

PUBH 8020 Public Health Informatics (5 cr.)
This course presents the skills required for leadership by high-level administrators and researchers in public health agencies and organizations. The course also offers an overview of database design, data storage, architecture, and computer networking for integration of database systems; data analysis using both medical and financial records across disparate public health settings for disease surveillance; standards for the collection, recording, and transmission of data; privacy, confidentiality, security, and ethics of using personal information in public health; use of geographic information systems (GIS) for mapping disease and risk factors; and methods for the evaluation of public health information systems. (Prerequisite: Required 6000-level curriculum.)

PUBH 8200 Organizing Community Action for Health Promotion and Education (5 cr.)
This course explores leadership in the effective organization of communities, interagency collaborative efforts, and work sites for collective action. The studies include analysis of risk factors at the community, work-site, local, state, national, and international levels. (Prerequisites: Required 6000-level and 8000-level curricula.)
**PUBH 8210 Public Campaigns for Health Promotion and Education (5 cr.)**
This course investigates the persuasive use of mass communications media and marketing strategies in promoting health, reducing risk factors, and influencing community leadership to support healthful conditions. Topics include the design of mass media campaigns, target markets, and working with and responding to media, including broadcast, print, World Wide Web, and other electronic communication media. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8215 Public Health Policy Design and Implementation (5 cr.)**
This course examines the leadership in reviewing and applying scientific data in the formulation of policy recommendations and drafting of legislation and ordinances to promote equitable distribution of health resources, healthful living conditions, and products to reduce risk factors. Leadership strategies for effective lobbying of decision-makers and community leaders are covered. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8220 Health Promotion and Education in Communities of Diverse Populations (5 cr.)**
This course provides information on the leadership in planning and organizing health promotion programs for the underserved, economically disadvantaged, and underrepresented populations including racial and ethnic groups, women, gays and lesbians, people with disabilities, children, and older adults. Students learn to design health promotion programs that consider the social, economic, and medical conditions influencing the health status of diverse populations. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8225 Design and Analysis of Community Trials (5 cr.)**
This course presents information on how to conduct randomized controlled experiments on health promotion and education programs, and disease-prevention interventions, with communities as units of analysis. This course provides an in-depth study of techniques for randomization, multicenter coordination, data management, team building, statistical analysis, models for community assessment (e.g., APEX or PATCH), publication, and ethics. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8300 Epidemiology of Infectious and Acute Diseases (5 cr.)**
This course examines the epidemiology of infectious and acute diseases. The course includes an examination of the impact of infectious diseases on populations, taxonomy and structure of disease agents, modes of transmission, infectivity, pathogenicity, virulence, incubation and surveillance methods. Students will apply infectious and acute disease epidemiology methods to specific health problems. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8310 Social and Behavioral Epidemiology (5 cr.)**
This course explores various works in social, behavioral, and psychiatric epidemiology, including those on the occurrence and distribution of illness. Course studies focus on the application of basic epidemiologic research designs; the study of social, behavioral, and psychiatric conditions in all age groups; and the relationship between sociocultural factors and individual or community behavioral issues. *(Prerequisites: Required 6000-level and 8000-level curricula.)*

**PUBH 8320 Environmental and Occupational Epidemiology (5 cr.)**
This course focuses on methods used in evaluating the health effects of physical, biological, and chemical agents in the environment and evidence-based information of such exposures. Assignments include policy questions raised by the scientific evidence; review and criticism of current literature on specific environmental and occupational health issues of current interest. Special emphasis is given to study design, exposure assessment, outcome definition, and sources of bias. *(Prerequisites: Required 6000-level and 8000-level curricula.)*
PUBH 8330 Epidemiology of Cancer and Other Chronic Diseases (5 cr.)
This course examines molecular and cellular biology of cancer and basic mechanisms of carcinogenesis, and the influences of chemical, viral, radiation, and genetic factors in human cancer. Studies include the acquisition and management of patient data for clinical and epidemiologic research; the role of environmental factors in cancer and other chronic disease causation; and fundamental issues in disease screening, registries, and applications to public health. (Prerequisites: Required 6000-level and 8000-level curricula.)

PUBH 8340 Molecular and Genetic Epidemiology (5 cr.)
This course acquaints students with recent developments in molecular and genetic epidemiology, including an overview of chronic and cardiovascular diseases. Course work includes molecular markers of environmental exposures, applications to risk assessment, and genetic markers of susceptibility. (Prerequisites: Required 6000-level and 8000-level curricula.)

PUBH 8350 Field Methods and Data Analysis in Epidemiology (5 cr.)
This course offers the opportunity to conduct epidemiological field studies. A focus is placed on theory and practice, which foster a better understanding and appreciation of survey methodology. Techniques and resources are given to successfully design and carry out the field portion of an epidemiological investigation, including staff recruitment and training; counting and listing techniques; enumeration methodologies; subject recruitment, retention, and tracking; data storage and management; and general survey instrument issues. (Prerequisites: PUBH 8427, required 6000-level and 8000-level curricula and the academic residency intensive seminar on Field Methods and Data Analysis in Epidemiology.)

PUBH 8427 Research Seminar II: Design in Public Health Research (5 cr.)
This course covers theory and hypothesis testing, including variable definition and measurement, and correlation, survey, experimental, quasi-experimental, nonexperimental, factorial, and single-subject designs. Topics include the language, logic, and execution of qualitative designs (inductive and quasi-deductive); and interfacing qualitative and quantitative designs. (Prerequisites: Required 6000-level and 8000-level curricula and SBSF 8417.)

PUBH 8437 Research Seminar III: Data Analysis in Public Health Research (5 cr.)
This course covers descriptive statistics, statistical inference, and quantitative techniques. Assignments include study of software for data analysis; qualitative data reduction, data displays, and conclusion drawing/verification; data management techniques; and interfacing qualitative and quantitative data for analysis. (Prerequisites: Required 6000-level and 8000-level curricula, SBSF 8417 and completion of the academic residency intensive seminar on Data Analysis in Public Health Research.)

PUBH 9000 Dissertation Research (30 cr. total)
This course sequence offers doctoral students the opportunity to integrate their program of study into an in-depth exploration of an interest area that includes the completion of a research study. Students complete the dissertation independently, with the guidance of a dissertation supervisory committee chair and committee members. Students complete a prospectus, proposal, institutional review board application, and dissertation. (Prerequisites: Completion of all necessary public health 6000-level and 8000-level curricula, and appointment of your dissertation supervisory committee.)

PUBH 9999 Continuing Research (non-credit)
Students enrolled in doctoral-level, course-based programs, and who have already registered for the required 30 dissertation credits but have not yet completed the dissertation must register for this course until completion. Students will be automatically registered for subsequent terms of PUBH 9999. (Prerequisites: 30 credits of PUBH 9000.)
READ

**READ 6581 Reading in the Content Areas, Grades 6–12 (3 sem. cr.)**
Teachers learn and use research-based strategies to enhance students’ reading proficiency and develop critical literacy skills while teaching essential content. Strategies are designed to enhance learning in science, mathematics, history, English, and other middle-level or secondary content areas.

**READ 6582 Writing in the Content Areas, Grades 6–12 (3 sem. cr.)**
Teachers integrate writing into content area curriculum, instruction, and assessment, and learn how to help students use writing to both deepen and clearly demonstrate their understanding of the subject matter. Strategies include the use of various types of journals and learning logs, writing frameworks, and note-taking tools. Special emphasis is given to the writing process and to skills in various writing genres.

**READ 6583 Technology and Literacy in the Content Areas, Grades 6–12 (3 sem. cr.)**
Teachers integrate technology into research-based instructional models and strategies to develop higher levels of literacy and facilitate more effective content area learning. Included are information literacy skills such as Internet searching, critically evaluating online resources, and expanding the learning community across boundaries.

**READ 6584 Supporting Struggling Readers, Grades 6–12 (3 sem. cr.)**
Teachers learn and use strategies to help improve middle-level and secondary students’ reading, writing, test-taking, and study skills as a way to increase their learning and achievement in the content areas.

SBSF

**SBSF 5100 Skills for Academic Integrity (1 cr.)**
This 2-week course is intended for students who want to develop a better understanding of an important aspect of academic integrity: plagiarism. Course assignments focus on developing a practical understanding of plagiarism and the skills necessary to avoid it.

**SBSF 5501/5502 Introduction to Statistics and Applied Research Methods (4 sem. cr./5 cr.)**
This course provides students with an introductory understanding of elementary statistics for social scientists as well as an introduction to social science research. Statistical methods include computation and analysis of frequency distributions, measures of central tendency, understanding of basic probability, and understanding of the normal curve, as well as conceptual understanding of effect sizes, probability value, and the correlation coefficient. Research methods include understanding basic language associated with research, such as the difference between theory and hypothesis, the nature of variables, and different research designs. Students learn to read research critically.

**SBSF 5503 Personal and Professional Communication (4 cr.)**
This course provides students with principles and strategies to effectively communicate in personal and professional situations. Personal communication focuses on developing skills to present information, influence others, and deal with conflict. Professional communication concentrates on communicating in work settings and with external groups. Communication research and theory serves as a foundation for exploring communication approaches and techniques. Social and cultural issues related to communication are considered.
SBSF 6000 Graduate Writing (4 cr.)
This course is designed to improve the writing skills of two groups of students: those whose course faculty have recommended they enroll in a writing skills course and those who wish to improve their writing to enhance their ability to succeed in Walden’s writing-intensive courses and KAMs. Course readings, activities, and assignments provide models to help students create their own writing processes, teaching them how to generate ideas, give those ideas initial shape in essay drafts, revise drafts based on faculty and colleague feedback, and edit and proofread final drafts. Establishing these individual processes will hone the analytical and writing skills students need to perform at a graduate level, and give students and faculty opportunities to assess and strengthen students’ proficiency level. Major projects include summary, rhetorical analysis, research, and self-reflection essays and peer review of these essays.

SBSF 6150 Graduate Writing for Non-Native Speakers of English (4 cr.)
This course is designed to improve the academic writing skills of graduate students whose first language is not English. Course readings, activities, and assignments provide models to help students master academic style and create their own writing processes, revise drafts based on faculty and classmate feedback, and edit and proofread final drafts. Establishing these individual processes will hone the analytical and writing skills students need to perform at a graduate level. Major projects include summaries, analyses of academic writing, research, and self-reflection essays, as well as peer reviews.

SBSF 7100 Research Forum (6 cr.)
Under the guidance of their faculty mentor, students pursue scholarly research associated with Knowledge Area Modules (KAMs). They learn to work independently as scholars and develop a variety of important skills. For example, they learn to gather information such as research findings and theories from library databases and Web-based resources. They develop critical-thinking skills, learn to ask the right questions, learn the latest about their professional practice, and apply their newly acquired knowledge to real-world problems for the benefit of others.

SBSF 8005 Foundations for Doctoral Study (6 cr.)
This course introduces students to Walden University and to the requirements for successful participation in an online curriculum. It provides a foundation for academic and professional success as a scholar-practitioner and social change agent. Course assignments focus on practical application of writing and critical-thinking skills and promote professional and academic excellence. Major assignments include the preparation of the Professional Development Plan, Plan of Study, and a sample KAM Learning Agreement. (Students in selected doctoral programs/specializations are required to take this course immediately upon enrollment and must successfully complete it before proceeding with KAMs or coursework.)

SBSF 8417 Research Seminar I: Human Inquiry and Science (4 cr.)
This seminar focuses on students’ acquisition of substantive, foundational knowledge of the philosophy of science, including the construction, use, and verification of concepts, models, and theories. Qualitative and quantitative frameworks for inquiry are introduced. Students examine ethical, social, and political aspects of conducting research, producing knowledge, and engaging in scholarship in the American academy, including the role of the professoriate. (Offered every quarter to Ph.D. students. Completion within first three quarters of enrollment is required for students in programs/specializations requiring AMDS 8000, PPPA 8000, or PUBH 6000. Prerequisites: AMDS 8000, PPPA 8000, PUBH 6000 or SBSF 8005. Students who take and successfully complete SBSF 8005 must complete one additional full quarter of enrollment before enrolling in SBSF 8417.)
SCIE 6650 Try Science (3 sem. cr.)
This introductory science course helps participants see the science in common everyday events and focuses on the topic of water. The goals of the course are to extend understanding of key scientific concepts through inquiry, to learn effective strategies for planning and teaching science, and to plan and carry out inquiry-based scientific investigations with children. Overarching content themes include scientific inquiry, properties and behaviors of water, and transfer of energy.

SCIE 6651 Investigating Physics: Motion and Forces (3 sem. cr.)
Participants investigate motion and forces through direct observation, through analysis of video, and by the creation and interpretation of graphic representations. The works of Aristotle, Galileo, and Newton are highlighted, and the historical and cultural contexts from which key physics concepts emerged are examined. Participants apply their new understanding to everyday occurrences in the physical world.

SCIE 6653 Biology Explorations: Explorations in Variation, Diversity, and Adaptation (3 sem. cr.)
Students investigate various aspects of biological adaptation and apply these new understandings to the real world, both locally and globally. The course focuses on the biology of grasses, with investigations of germination and growth, adaptation, co-evolution between grasses and grazers, biogeography, the domestication of grasses, and variation and natural selection.

SCIE 6655 Earth Science from a New Perspective (3 sem. cr.)
A central purpose of this course is to begin seeing the world in new ways. The course focuses on the topic of one river and begins by inviting participants to “uncover” the connections between that river and the rest of the Earth systems. The course aims to assist participants in gaining new perspectives on Earth Science by using resources such as satellite images and modeling tools.

SCIE 6657 Ecology: Organisms, Nutrients, and the Environment (3 sem. cr.)
Students extend their understanding of ecology through a focus on one central question: How are matter and energy cycled in ecosystems? By continually returning to the central question, participants investigate various aspects of nutrient flow with hands-on investigations of decomposition. New understandings are applied to the real world.

SCIE 6659 Engineering: From Science to Design (3 sem. cr.)
This course introduces students to engineering by focusing on the design of houses to resist earthquakes. They explore the relationship between engineering and scientific concepts, such as forces and motion from Physics and earthquakes from Earth Science. Students carry out a design project in which they propose, develop, and evaluate an earthquake-resistant house.